Institute for 21st. Century
Business Series No. 6



# THE FRESHWATER FISH MARKETING CORPORATION OF CANADA

Charles W. Lamb

Donald F. Mulvihill

INSTITUTE FOR 21st ENTURY BUSINESS

CENTER FOR BUSINESS AND ECONOMIC RESEARCH

COLLEGE OF BUSINESS ADMINISTRATION

KENT STATE UNIVERSITY KENT, OHIO 44240

Institute for 21st Century
Business Series No. 6

# THE FRESHWATER FISH MARKETING CORPORATION OF CANADA

Charles W. Lamb

Donald F. Mulvihill

published by

The Institute for 21st Century Business
Center for Business and Economic Research
Graduate School of Business Administration
KENT STATE UNIVERSITY KENT, OHIO 44242

COLLEGE OF BUSINESS ADMINISTRATION

Gail E. Mullin.....Dean

CENTER FOR BUSINESS AND ECONOMIC RESEARCH

Anant R. Negandhi.....Director

INSTITUTE FOR 21ST CENTURY BUSINESS

Donald F. Mulvihill.....Coordinator

This work is a result of research sponsored by NOAA Office of Sea Grant, Department of Commerce, under Grant #2-35364. The U. S. Government is authorized to produce and distribute reprints for governmental purposes not withstanding any copyright notation that may appear hereon.

## FOREWORD

A Sea Grant project has been conducted at Kent State University examining the marketing and physical distribution of fish and fish products into the Midwest.* Four monographs dealing with the members of the distribution channel have been published. These deal with the use of fish and attitudes of wholesalers, retailers, institutional users, and household consumers in Cuyahoga and Summit counties, Ohio.

In interviews with wholesalers and retailers, it was found that some of their fish, particularly freshwater fresh fish (not frozen or prepared), came from Canada. Since freshwater fish from the interior provinces must come through the Freshwater Fish Marketing Corporation, a Crown corporation, a study was made of the marketing situation before and after its institution. The results of this research are presented in this monograph.

Since there are some producers cooperative organizations in the United States, none of which is given exclusive rights in any market, it was thought that this study would provide a contrast to these groups and a basis for further study of the cooperative as a member of the distribution structure.

All these studies should prove to be useful to members of the fishing industry, students of marketing, and other members of the marketing channels.

---

NOAA 2-35364, Application of Computer Technology and Advanced Physical Distribution Techniques to Seafood Marketing.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

# THE FRESHWATER FISH MARKETING CORPORATION OF CANADA

## CHAPTER I

## BACKGROUND AND ESTABLISHMENT OF THE CORPORATION

### Introduction

In marketing perishable food products, one of the difficulties is to establish an orderly distribution channel to provide for the smooth, rapid movement of the good from the point where it is harvested to that where the consumer expects to buy it. Coupled with the physical distribution, there must be a communications system to indicate to the controllers of the source where the good is desired. Such a concept has been proposed in regard to the marketing of fish, particularly fresh fish, into the Midwest. By marketing more fresh fish, either fin- or shellfish, there should be a greater return to all members of the channel, including the fishermen.

To study the feasibility of such a system, research has been conducted as to the existing situation in the United States. In so doing, it was found that, in certain areas on the coasts, producer cooperative organizations had been formed to bring more order and control into marketing process. Similarly, the appearance of freshwater fish from Canada in the Midwest was the result of the

activities of a Crown corporation, the Freshwater Fish Marketing Corporation. This has been an attempt to bring about the orderly physical distribution of fish into the Midwest so that all members of the channel would benefit while the United States consumers would have more fresh fish. Since little has been written about this operation and since it might provide better insight into orderly fish marketing, this historical study and comparative analysis of marketing and physical distribution before and after the corporation was undertaken.

## Geographical Setting

This study focuses primarily on the Canadian segment of the marketing system for freshwater fish produced in the provinces and territory participating in the Freshwater Fish Marketing Corporation. This area, shown on the map on the following page, includes the provinces of Manitoba, Alberta, and Saskatchewan, as well as the northern portion of Ontario and the Northwest Territories.

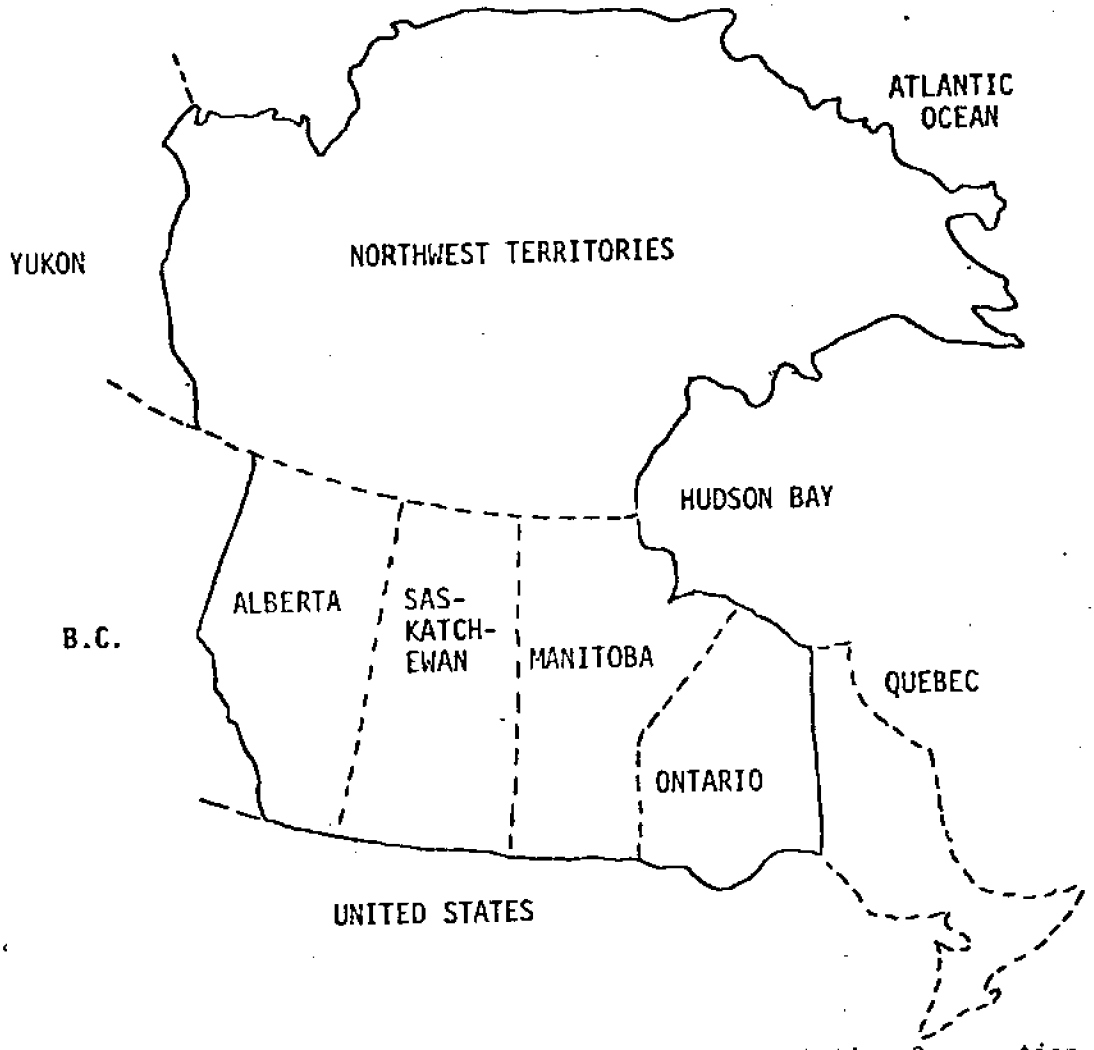
In 1967, employment in the freshwater fisheries on Ontario, Manitoba, Saskatchewan, Alberta, and Northwest Territories was approximately 14,000 persons. This included 13,000 fishermen,[1] and 899 persons employed in fish processing

---

[1] Canada Year Book, (Ottawa: Dominion Bureau of Statistics, 1972), p. 682.

FIGURE 1

AREA UNDER THE JURISDICTION OF
THE FRESHWATER FISH MARKETING CORPORATION




Source: Quick Facts about the Freshwater Fish Marketing Corporation. (Winnipeg: Freshwater Fish Marketing Corporation.)

plants.[2] During that year, commercial fishermen in the five province areas landed over 50 tons of freshwater fish.[3] The landed value of the catch was $11,278,000 and its market value was $15,759,000.[4]

The commercial fishing industry is particularly important in Northern Ontario, the Northwest Territories, and the northern portion of the prairie provinces where alternative employment opportunities are quite limited. Below is a brief description of the area which later came under the jurisdiction of the Freshwater Fish Marketing Corporation.

Northern Ontario

Northern Ontario is for the most part a thinly populated, forested region.[5] The urban population is supported primarily by mining, secondary manufacturing, and service industry due to unfavorable climate conditions and rugged terrain.

There are over 250 inland lakes in Northern Ontario ranging in size from Lake of the Woods, covering 953 square miles in the province, to some covering less than one square mile. Approximately 5,000,000 pounds of freshwater fish are

---

[2] Annual Statistical Review of Canadian Fisheries, Vol. 4 (Ottawa: Department of the Environment, 1972), p. 64.

[3] Ibid., p. 27.

[4] Ibid., p. 27.

[5] D. F. Putnam and D. P. Ken, A Regional Geography of Canada, (Toronto: J. M. Dent & Sons Limited, 1966), p. 269.

landed in the area annually.[6]

The Prairie Provinces

The population of the prairie provinces, Manitoba, Saskatchewan, and Alberta totals approximately 3.5 million,[7] with the majority of the people living in the southern half of the area.[8] Agriculture, particularly commercial grain farming, is the most important industry in the region, producing approximately 30 per cent of the net annual income in the three provinces.[9]

Fresh water lakes cover over 67,000 square miles in the region. In an area 5,294 square miles southwest of Reindeer Lake in Saskatchewan, there are 7,500 lakes. There are also 3,000 lakes located in Manitoba and Northern Ontario in an area 6,094 square miles south and east of Lake Winnipeg.[10] Three of the largest, and by far the most important commercial fishing lakes, Winnipeg, Winnipegosis, and Manitoba, covering a total of 13,405 square miles, are located in southern Manitoba. Both northern Manitoba and northern

---

[6] Ibid., p. 269.

[7] Canada Year Book, 1972, op.cit., p. 1369.

[8] D.F. Putnam and D.P. Ken, op. cit., p. 327.

[9] Ibid., p. 682.

[10] Canada Year Book, 1972, op. cit., p. 30.

Saskatchewan have hundreds of small lakes. Lake Athabasca, covering 3,120 square miles, is located in the northern portion of Saskatchewan and Alberta.

In 1967, nearly 10,500 persons were engaged in the primary fishing industry in the three provinces.[11] Commercial landings for that year totaled 42,480,000 pounds in the three provinces. The landed value of the catch was $4,448,000.[12]

The Northwest Territories

The Northwest Territories cover 1,253,438 square miles of land and 51,465 square miles of fresh water. The largest lakes in the region, Great Bear and Great Slave, cover 12,275 and 10,980 square miles respectively.[13] The total population in the area is approximately 30,000 persons.

Most of the Northwest is unsuited for commercial agriculture. Lumbering is limited to small mills which cut lumber for local needs and are located near small settlements.[14] Fur trading and commercial fishing are the most important sources of income in the region. In 1967, 4,342,000 pounds of freshwater fish were landed in the Territories. Fishermen re-

---

[11] Ibid., p. 682.

[12] Annual Statistical Review of Canadian Fisheries, op. cit., p. 27.

[13] Canada Year Book, 1972, op. cit., pp. 28, 31.

[14] D. F. Putnam and D. P. Ken, op. cit., p. 462

[15] Annual Statistical Review of Canadian Fisheries, op. cit., p. 27.

ceived $842,000 for the catch.[15]

## Industry Problems

The freshwater fish industry of Northern Ontario, the prairie provinces, and the Northwest Territories has historically been characterized by a large number of small producers engaged in the seasonal harvesting of a highly perishable commodity. Inefficient production, processing, and distribution methods contributed to excessive costs and low returns, especially to primary producers. Since many of the inland fishermen had no alternative employment opportunities, they were totally dependent upon the commercial fishing industry for their livelihood. The result was a subsistence standard of living for the majority of the inland fishermen, predominantly Indian and Metis.

Another factor contributing to the industry's problems was the high degree of dependence on export markets for the commercial catch. During the period 1956-1968, approximately 80 per cent of the production of the freshwater fish industry was marketed outside of Canada, almost exclusively to the United States.[16]

---

[15] Annual Statistical Review of Canadian Fisheries, op. cit., p. 27

[16] George H. McIvor, op. cit., p. 4.

Other factors contributing to the difficulties faced by the industry during this period included the highly perishable nature of the product, the large number of agencies involved in moving the product from producer to consumer, the uncertainties resulting from widely fluctuating supply and demand patterns, the lack of coordination of supply with demand, and the uncertainty of prices.

## Landings, 1956-1968

During the period 1956-1968, total landings of freshwater fish in Ontario, the prairie provinces, and the Northwest Territories averaged over 113 million pounds annually.[17] The catch was harvested from over 400 lakes ranging in size from Lake Superior, 31,820 square miles (11,100 miles in Canada), to some less than one mile square.[18]

During this period, whitefish remained the most important commercial specie of the Canadian freshwater fisheries, with landings averaging 22 million pounds annually. This one specie accounted for over 18 per cent of total freshwater fish landings in Canada, and as much as one-third of the freshwater fish landings in Western Canada and northern Ontario.

---

[17]See Appendix A, Table 1.

[18]George H. McIvor, op. cit., p. 63.

Other major commercial species in the western inland fishery included trout, pickerel, pike, and sauger. In 1968 these five species accounted for approximately 37 per cent of the total commercial landings of freshwater fish in Canada, and over 62 per cent of its landed value.[19] These five species were landed primarily in Northern Ontario, the prairie provinces, and the Northwest Territories. Since these regions comprise the area of focus for this study, future emphasis will be placed on Commercial landings of whitefish, pickerel, trout, pike, and sauger.

## Markets, 1956-1968

More than 80 per cent of the freshwater fish caught in Northern Ontario, Manitoba, Saskatchewan, Alberta, and Northwest Territories was exported. During the 1956-1968 period, nearly all of the freshwater fish exported from Canada went to the United States. Exceptions included small shipments of pike and whitefish primarily to France and Finland, accounting for less than five per cent of total exports. This export segment of freshwater fishing industry, therefore, was quite important to both Canada and the United States. Its importance to Canada was in terms of providing an outlet for excess supply as well as providing a significant contribution to the country's balance of trade.

---

[19] Annual Statistical Review of Canadian Fisheries, op. cit., p. 37.

The United States, on the other hand, represented a large demand for freshwater fish. Canada was the primary foreign supplier of the commodity. In 1964, for example, imports of whitefish, pickerel,[20] and pike accounted for 92, 92, and 96 per cent respectively of the quantity of these species marketed in the United States.[21]

## The Production/Marketing System, 1956-1968

The production/marketing system for Canadian freshwater fish prior to 1969 included fishermen, dealers, processors, exporters, importers, wholesalers, retail institutions, and consumers. The specific members in the system which participated in the various flows were determined by several factors including the product form demanded, the location of the producing area, the distance between fisherman and consumer, and possible means of transporting. Different combinations of these factors often resulted in different patterns of movement.

Form demanded generally refers to whether or not the product is whole or filleted. Whole fish can further be classified as round, dressed, or headless.[22] Fillets can be

---

[20]Includes blue pickerel, yellow pickerel, and sauger.

[21]George H. McIvor, op. cit., pp. 118-119.

[22]Round fish are as they come from the water; dressed have viscera, gills, kidneys, etc. removed; and the headless are dressed with the head also removed. Fillets are headless with the major bone structure also removed.

categorized as "skin-on" or "skinless."

The location, distance, and transportation factors created significant constraints requiring more participants as the distance from producer to consumer increased. Regardless of the actual number of participants in the system, the functions of harvesting, dressing, preserving, collecting, sorting, transporting, storing, and dispersing must be performed.

In January, 1965, the Federal-Provincial Conference on Fisheries Development in Ottawa included discussions on the marketing problems facing the inland freshwater fish industry. These deliberations led to the establishment of the Inter-Governmental Committee on Marketing Organization for the Freshwater Fisheries, which later became the Sub-Committee of the Federal-Provincial Prairie Fisheries Committee on Marketing Organization. This sub-committee was charged with the responsibility of evaluating the feasibility of adopting marketing board techniques within the industry.[23] The recommendations of this sub-committee resulted in the formation of the Commission of Inquiry into Freshwater Fish Marketing under the leadership of George H. McIvor. The

---

[23]For a discussion of marketing boards, see: Franz C. Helm, The Economics of Co-operative Enterprise, (London: University of London Press, Ltd., 1968) pp. 189-195.

charge to the Commission read:

> The Commission is hence instructed to inquire into and report upon the possibility of better coordination which will achieve more orderly marketing...and report upon whether the current marketing situation warrants an export monopoly; whether persons and organizations involved in the marketing process want organized marketing' and whether an export monoply or marketing board technique of selling can work for marketing freshwater fish.[24]

Finally, based upon the findings of the McIvor Commission, the Senate and House of Commons on February 27,1969, passed legislation creating a Crown corporation[25] named the Freshwater Fish Marketing Corporation.

The Corporation was established as a sole interprovincial and export seller of the products of the commercial freshwater fisheries of the participating provinces. The objectives of the Corporation, as established by law, are: (a) the marketing of fish in an orderly manner; (b) increasing returns to fishermen; and (c) promoting international markets for, and increasing inter-provincial and export

---

[24]George H. McIvor, Report of Commission of Inquiry Into Freshwater Fish Marketing, 1965, p. VII.

[25]"In Canada, a Crown corporation is an institution with corporate form brought into existence by action of Government of Canada to serve a public Function", Ashley, C. A., and Smails, R.G.H., Canadian Crown Corporations, (Toronto: The McMillen Company, 1965.)

trade in, fish.[26]

## The McIvor Commission

The Commission of Inquiry into Freshwater Fish Marketing, generally referred to as the McIvor Commission, was established for the purpose of considering the proposals made to the Federal-Provincial Prairie Fisheries Committee by its Sub-Committee on Marketing Organization. The Commission was also charged with the responsibility of determining the marketing problems facing the freshwater fish industry in the Provinces of Ontario, Manitoba, Saskatchewan, Alberta, and the Northwest Territories, and making recommendations with respect to the resolution of those problems.

### Members of the Commission

The Commission of Inquiry into Freshwater Fish Marketing had four members. The Commissioner, George H. McIvor, was chairman of the board of directors of Robin Hood Flour Mills. McIvor was formerly the chairman of the Canadian Wheat Board. He served in that capacity for 21 years. Other members of the Commission included: Dr. W. A. Kennedy, a biologist and director of the London, Ontario, Station of the Fisheries Research Board of Canada; W. L. Posthumus, an

---

[26] An Act to regulate interprovincial and export trade in freshwater fish and to establish the Freshwater Fish Marketing Corporation, 17-18 Elizabeth II, 1969 Chapter 21, p. 10.

economist from the Department of Trade and Commerce; and Roger Bedard, secretary to the Commission, from the Fisheries Division of the Department of Trade and Commerce.[27]

Public Hearings

During the course of investigation, public hearings were held in 13 cities in the five provincial areas. Information was also solicited from various private and governmental organizations and agencies including United States wholesalers, processors, and retailers in New York, Detroit, and Chicago.

The Commission was instructed to investigate and report upon:

> (a) the nature of the factors which give rise to the weakness of prices for freshwater fish, particularly in the export market;
>
> (b) the possibility of better coordination of production and supply in relation to demand to achieve more orderly marketing;
>
> (c) the possibility and desirability of establishing an export monopoly to achieve more efficient marketing and thus provide better returns to primary producers, taking into consideration the proposals which have been before the Federal-Provincial Prairie Fisheries Committee; and
>
> (d) relevant matters which may in the course of the inquiry arise or develop and which, in the opinion of the Commission, should be included within the scope of the inquiry and report.[28]

---

[27]Minutes of Public Hearings, Commission of Inquiry Into the Freshwater Fish Industry (Ottawa: The Queen's Printer, 1965), p. 104.

[28]Ibid., p. 3.

The Minutes of Public Hearings, Commission of Inquiry Into the Freshwater Fish Industry indicated that, in general, fishermen, fishermen's organizations, and provincial government officials in Northern Ontario, Manitoba, Saskatchewan, Alberta, and the Northwest Territories were favorably disposed toward some form of intervention by the federal government. Some individuals and groups testifying and presenting briefs were unclear as to what should be done; however, others presented specific proposals. For example, in Manitoba the director of the Cooperative Services Branch, Department of Agriculture and Conservation, proposed a marketing board for the freshwater fish industry similar to the Canadian Wheat Board.[29] In Saskatchewan where there was a strong cooperative organization, the general manager of Co-operative Fisheries Ltd. recommended the establishment of a central export selling agency having control over the export of all species of freshwater fish.[30] In Alberta, Cold Lake Co-op Fisheries Limited, a fishermen's co-operative proposed a marketing board which would control and regulate prices, opening and closing of fishing seasons, packing, processing, storage and freezing of fish, and make

---

[29] Ibid., pp. 12-17.

[30] Ibid., pp. 248-268.

financial assistance available to fishermen.[31] In the Northwest Territories, fishermen recommended that an organization be established which would enable them to receive a standard price for fish throughout the year.[32] In Ontario, fishermen near the Great Lakes generally agreed that their situation was different than those prevailing in Northwest Ontario and the prairie provinces; there was no consensus, however, as to whether or not a marketing board would be to their advantage.[33] In hearings conducted in Northern Ontario, fishermen were generally in favor of some sort of intervention by the government.[34]

Dealers and processors in all five provinces, however, indicated opposition to the establishment of any type of government-sponsored selling organization or marketing board. In general, their position was that the government could best serve the fishermen by: (a) providing more funds for biological research in the area of lake science; (b) regulate the opening and closing of fishing seasons in the various provinces to better coordinate supply with demand; and (c) provide more financial and technical assistance to the fishermen

---

[31] Ibid., pp. 443-445.

[32] Ibid., p. 992.

[33] Ibid., p. 933.

[34] Ibid., p. 992.

and the secondary or processing industry. Concerning the low level of annual income that individuals received from fishing, it was pointed out that fishing seasons are only open four or five months each year, and many fishermen supplement their income by trapping, farming, forestry, and other occupations.

Findings

The findings of the Commission supported the evidence submitted to the Federal-Provincial Prairie Fisheries Committee by its Sub-Committee on Marketing Organization. These findings indicated a weakness of export prices, and a need for reorganization of the fisheries.

The Commission noted three factors which it felt to be the most significant contributors to the weakness of export prices. These included: (a) the perishable nature of round or dressed fresh fish; (b) the uncertainties resulting from ineffective quality control and the current inspection system; and (c) the irregular demand patterns in the United States markets. The Commission also noted that prices were weak because there were too many exporters to counter the control exercised by a few importers.[35]

The Commission concluded that the price paid to the fisherman reflected the weakness in export prices as well as

---

[35]George H. McIvor, op. cit., pp. 6-8.

the inefficiencies in handling and processing in Canada.[36]

Recommendations

Based upon its investigation, the Commission made 17 recommendations[37] which it felt would result in higher earnings to the fishermen. Its recommendations were also designed to affect a reduction in total costs to the system, thereby increasing returns to fishermen without increasing the price paid by consumers.

The recommendations proposed by the McIvor Commission were largely interrelated and predicated on the assumption that a freshwater fish marketing board should be established. The recommendations were basically of two types: those dealing with the role of the marketing board; and those dealing with government activities in support of the board.

In the first case, the Commission recommended that a freshwater fish marketing board be established by Federal legislation which would be given the exclusive right to interprovincial and export sale of freshwater fish landed in Alberta, Manitoba, Saskatchewan, Northern Ontario, and the Northwest Territories. It also recommended that the board purchase fish only from the fisherman, so that grading, quality control, and market coordination could begin at the earliest possible stage. Likewise, it was felt that, by

---

[37]The Commission's recommendations are shown in Appendix C.

taking possession of the fish at this time, the handling, packing, processing, storing, and forwarding functions could be performed more efficiently. Where possible, the Commission recommended that local dealers and processors currently participating in the marketing system be retained by the board as its representatives. Under these circumstances, the board would negotiate agreements for handling, processing, forwarding, and storing fish accepted at the delivery points. It recommended that these representatives be paid on a "piece-work" schedule, based upon the specific tasks performed and the quantities handled. The Commission contended that by: (a) eliminating duplication of effort in assembling and forwarding; (b) eliminating points of conflict between participants; and (c) establishing guidelines for handling, processing, forwarding, and storing fish, the system would become more efficient. In cases where local dealers and processors could not be retained, the Commission recommended that the board establish and operate its own facilities on a self-sustaining basis.

Other recommendations regarding the role of the Board concerned the financing of fishermen and the pricing structure of the system. Particularly significant in the proposed marketing structure was the recommendation that the marketing board be given the authority to finance fishermen with seasonal working capital.

The Commission recommended that these loans be restricted to working capital for such things as gasoline, oil, food, supplies, and repairs, and that they not be made available for the purchase of capital equipment such as boats, motors, or nets. The Commission contended that this limitation was necessary in order to insure the independence of the Board and the fishermen. It suggested that financial assistance programs administered by the Indian Affairs Branch of the Department of Northern Affairs might be expanded to cover the financing of boats, motors, and nets for individual fishermen. The Commission also recommended that: (a) individual loans not exceed an amount which could be repaid during the same fishing season; (b) the financing operations should be handled separately from the marketing operation so that financing costs could be assertained accurately and levied equitably, i.e. on the borrowing fishermen and per dollar borrowed; and (c) repayments would be made out of the borrower's account with the board.[38]

With regard to the pricing structure, the Commission developed detailed proposals for payment to fishermen. First, it proposed that the board establish initial prices for each specie of fish by grade prior to the opening of each season, based on the anticipated market returns of the various species.

---

[38]George H. McIvor, op. cit., p. 14.

This initial payment schedule would also vary according to whether the fish were delivered round, dressed, or headless, packed or not packed. By discriminating in this manner, fishermen could increase their returns by performing additional tasks. Second, it recommended that pool accounts be established for each specie of fish reflecting the difference between selling price and initial price plus the costs of marketing. If surpluses exist in any pool accounts after all fish delivered during a season were sold, the pools would be distributed among participating fishermen based upon the relative poundage they contributed to the pool. Where losses occur in particular pools, these would be carried in overall operating expenses.

Concerning selling prices, the Commission recommended:

> that the Board sell and dispose of the fish for such prices as it may consider satisfactory, keeping in mind the overall purpose of promoting the sale of Canadian freshwater fish in world markets.[39]

The Commission also recommended that a communications program be conducted in order to familiarize fishermen with the operation of the marketing board and instruct fishermen in methods for producing a high quality catch. Other recommendations included providing financial assistance to

---

[39] Ibid., p. 14.

dealers and processors; strict enforcement of water pollution laws; continued and expanded research pertaining to freshwater fish; and coordinating opening and closing of commercial fishing seasons by the governments concerned.

Based on the findings and recommendations of the McIvor Commission, the Senate and House of Commons of Canada enacted legislation creating the Freshwater Fish Marketing Corporation.

## The Freshwater Fish Marketing Act

The Freshwater Fish Marketing Act of 1969 provided for the establishment of a Crown corporation to be named the Freshwater Fish Marketing Corporation. In accordance with the Act, the Corporation consists of a board of directors composed of a chairman, a president, one director recommended by the government of each participating province, and four other directors appointed by the Governor General in Council.[40] The Corporation commenced operation on May 1, 1969.

> The Corporation was established for the purpose of marketing and trading in fish, fish products and by-products, and given the exclusive right to inter-provincial and export trade to market the products of the commercial fishery of provinces which participate in the program. It is also given the

---

[40]The (Privy) Council includes all living members of past and present federal cabinets as well as other distinguished persons. Active members, composed of the Cabinet of the day, advise the Governor General on all royal powers and executive authority of the Crown in relation to Canada.

> right of acceptance and exercise of additional powers conveyed to it by governments under agreements which establish the participating status of provinces.[41]

Specifically, the Corporation is empowered to:

> (a) buy fish and dress, fillet, freeze, package or otherwise prepare fish for market;
>
> (b) buy, manufacture or produce fish products and by-products and package or otherwise prepare fish products and fish by-products for market;
>
> (c) store, ship, insure, import, export, market, sell or otherwise dispose of fish, fish products and fish by-products bought, prepared, manufactured or produced by it;
>
> (d) purchase, lease or otherwise mortgage, hypothecate, sell or otherwise deal with any real or immovable property;
>
> (e) establish branches or employ agents in Canada or elsewhere;
>
> (f) invest any money in its possession or control that in its opinion is not immediately required for the purposes of its operation, in securities of or guaranteed by the Government of Canada and sell any securities so acquired by it and re-invest the proceeds thereof in like manner;
>
> (g) borrow money from any bank upon the credit of the Corporation;
>
> (h) make loans for working capital on a seasonal basis to persons engaged in fishing for commercial purposes in a participating province; and

---

[41] Freshwater Fish Marketing Corporation, Annual Report, 1969-1970 (Winnipeg: Freshwater Fish Marketing Corporation, 1970), p. 4.

(i) do all such other things as are necessary or incidental to the exercise of its powers or of the carrying out of any of its functions under this Act.[42]

Accordingly, no persons within the jurisdiction of the Freshwater Fish Marketing Corporation other than the Corporation or its authorized agents may:

(a) export (freshwater) fish from Canada;

(b) send, convey or carry fish from a participating province to another participating province or to any other province;

(c) in a participating province, receive fish for conveyance or carriage to a destination outside the province; or

(d) sell or buy or agree to sell or buy fish situated in a participating province for delivery in another participating province or any other province, or outside Canada.[43]

Under the provisions of Section 25 of the Freshwater Fish Marketing Act, agreements between the following provincial governments and the Government of Canada established the participation of these provinces on the dates indicated:

| | |
|---|---|
| Council of Northwest Territories | April 30, 1969 |
| Province of Saskatchewan | May 8, 1969 |
| Province of Manitoba | June 4, 1969 |
| Province of Alberta | August 8, 1969 |
| Province of Ontario | August 11, 1969 |

---

[42] An Act to regulate interprovincial and export trade... op. cit., p. 4.

[43] Ibid., p. 9.

The area under the jurisdiction of the Freshwater Fish Marketing Corporation is shown on the map below. The total area under jurisdiction is divided into five zones:

Zone 1 covering Northwest Ontario, with headquarters in Thunder Bay
Zone 2 covering Manitoba, with headquarters in Winnipeg
Zone 3 covering Saskatchewan, with headquarters in Prince Albert
Zone 4 covering Alberta, with headquarters in Edmonton
Zone 5 covering the Northwest Territories, with headquarters in Hay River

## Objectives of the Corporation

The objectives of the Corporation as stipulated in the Freshwater Fish Marketing Act are:

(a) the marketing of fish in an orderly manner;

(b) increasing returns to fishermen; and

(c) promoting international markets for, and increasing interprovincial and export trade in, fish.[44]

## Duties of the Corporation

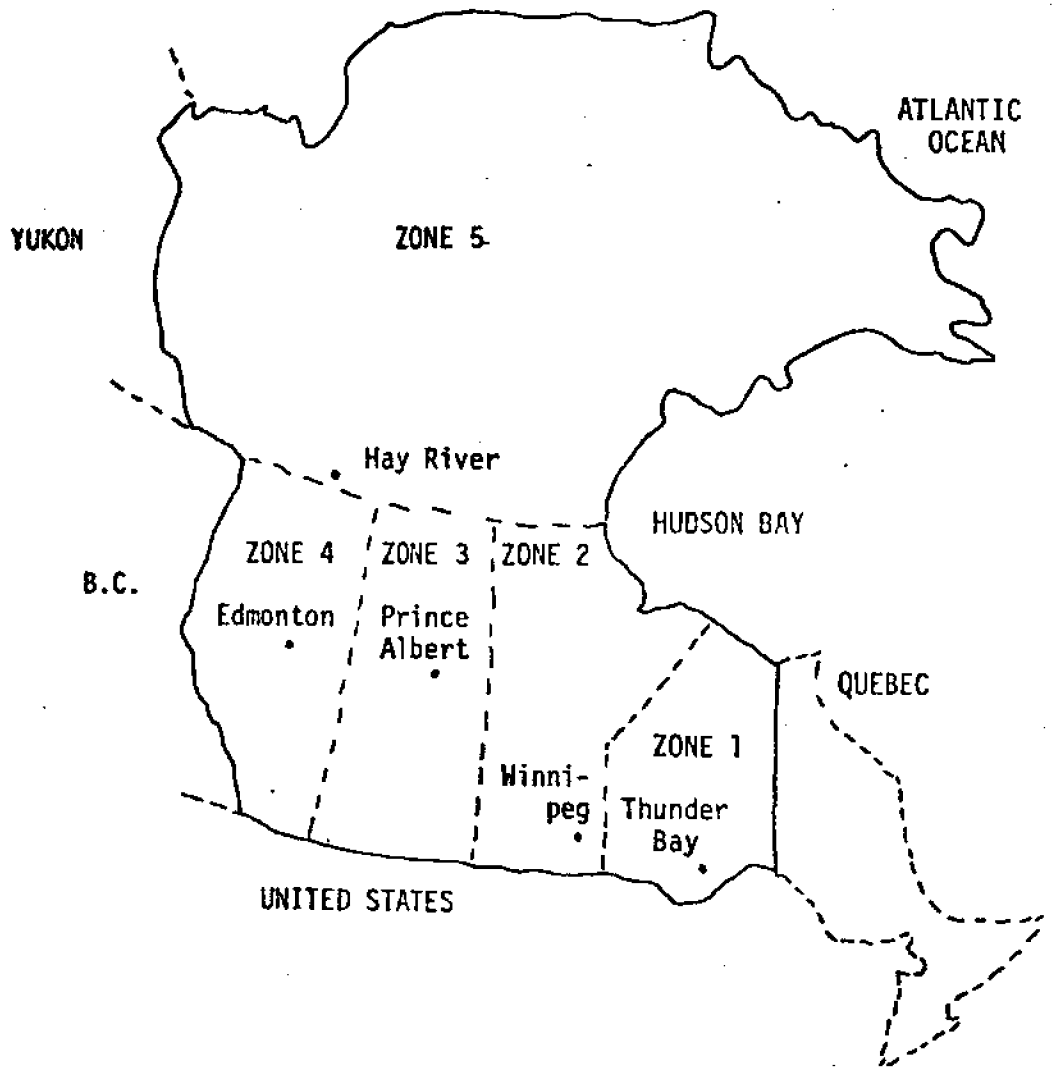
Pursuant to Section 23 of the Act, the Corporation is required to purchase all fish which are presented by commercial fishermen to agents of the Corporation for purchase.

---

[44] An Act to regulate interprovincial and export trade... op. cit., p. 10.

FIGURE 2

ZONES UNDER THE JURISDICTION OF THE
FRESHWATER FISH MARKETING CORPORATION




Source: Quick Facts about the Freshwater Fish Marketing Corporation. (Winnipeg: Freshwater Fish Marketing Corporation.)

The Corporation may then process and prepare the fish for market in any manner which it deems necessary to best achieve the above stated objectives. This includes the decision as to when and where the fish small be marketed.[45]

## Landings, 1969-1971

During the period 1969-1971, commercial landings of freshwater fish in Ontario, the prairie provinces and the Northwest Territories decreased drastically. Average annual landings for the three-year period were only 91,284,000 pounds.[46] This was a decrease of some 20 per cent, nearly 22 million pounds from the average of the previous 13 years. The decline in landings did not begin until 1970, when total landings fell by over 28 million pounds followed by a further decline of nearly 12.5 million pounds in 1971.[47] This decline affected each of the five major species and all fell to their lowest production levels for the entire 16 year period.[48] Total freshwater fish landings in Ontario, Manitoba, and Alberta also fell to their lowest levels for the

---

[45] Ibid.

[46] Appendix A, Table 1.

[47] Ibid.

[48] Appendix A, Table 2.

entire 16 year period.[49]

A primary factor contributing to the decline in commercial landings was the discovery of mercury pollution in the waters of Saskatchewan, Ontario, and Manitoba in the winter of 1970. This mercury contamination was ultimately traced to chemical companies located along the Saskatchewan River. Subsequent investigations indicated an even wider area of mercury contamination affecting predatory species of fish. This resulted in the closure of important commercial fishing lakes including Lake Winnipeg and Cedar Lake. Losses in part due to lake closings were also compounded by unusually severe weather in the winter of 1971.

During the fiscal year beginning May 1, 1969, and ending April 30, 1970, the Freshwater Fish Marketing Corporation purchased 33,676,037 pounds of whitefish, trout, pickerel, pike, and sauger from commercial fishermen in the participating provinces.[50]

Landings in the province of Ontario were only partially reflected in this figure, since the participating status of the province was not established until late in the summer season which ended October 31. Fishermen in the northern

---

[49]Appendix A, Table 1.

[50]Freshwater Fish Marketing Corporation, Annual Report, 1969-1971, op. cit., p. 17.

portion of the province did, however, participate in the winter season commencing November 1 and ending April 30, 1970.

For the fiscal year 1970-71, purchases of the five major species totaled 28,681,495 pounds, approximately 15 per cent less than in 1969-70.[51] This decline was primarily due to the closure of some commercial fishing lakes in the region.

## Sales, 1969-1971

Annual sales for the 1969-70 season totaled 29,987,146 pounds with the five primary species accounting for 26,499,365 pounds of the total. This included 13,966,551 pounds sold round or dressed fresh, 5,834,458 pounds sold round or dressed frozen, and 6,698,355 pounds of fillets which were primarily sold frozen. During the 1970-71 season, sales of the five primary species accounted for 23,087,206 pounds of the 26,866,516 pound total. Round or dressed fresh fish accounted for 43 percent of sales of the five primary species, with round or dressed frozen and fillets accounting for 27 and 30 per cent respectively. (Table 1.)

---

[51]Freshwater Fish Marketing Corporation, Annual Report, 1970-71 (Winnipeg: Freshwater Fish Marketing Corporation, 1971), p. 17.

## Markets, 1969-1971

The United States market reamined by far the most important market for Canadian freshwater fish. However, as Table 2 indicates, exports of the five primary species to the United States followed a downward trend from 1968 through 1971. Also, when comparing Canadian freshwater fish exports to countries other than the United States in 1968 with 1969, 1970, and 1971 figures, it was evident that the industry was rapidly expanding its export market. in 1968, total Canadian exports of the five primary species to countries other than the United States were 1,013,000 pounds. The figures for 1969 and 1970 represent increases of 46 and 24 per cent respectively. Although exports to countries other than the United States declined in 1971, they were still 50 per cent higher than in 1968. There was also an increase in domestic sales of the five primary species from approximately six million pounds in 1968 to approximately 7.2 million pounds during the 1970-71 season.

These figures indicate that, while the Canadian freshwater fish industry is still heavily dependent upon the United States market, other domestic and international markets are available, and have been penetrated to some extent.

TABLE 1

Freshwater Fish Marketing Corporation
Annual Sales, 1969-1970, 1970-1971

| | Fresh | | Frozen | | Filleted | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 1969-1970 | 1970-1971 | 1969-1970 | 1970-1971 | 1969-1970 | 1970-1971 | 1969-1970 | 1970-1971 |
| Whitefish | 6,193,436 | 5,410,844 | 3,764,736 | 3,761,153 | 3,419,583 | 2,737,884 | 13,377,755 | 11,909,881 |
| Pickerel & Sauger | 5 978,309 | 3,478,199 | 583,804 | 807,179 | 1,061,687 | 1,397,162 | 7,623,800 | 5,682,540 |
| Trout | 784,714 | 519,446 | 632,426 | 575,971 | 122,300 | 373,191 | 1,539,440 | 1,468,608 |
| Pike | 1,010,092 | 589,222 | 853,492 | 983,804 | 2,094,785 | 2,453,151 | 3,958,369 | 4,026,177 |
| Total for Five Species | 13,966,551 | 9,997,711 | 5,834,458 | 6,128,107 | 6,698,355 | 6,961,388 | 26,499,365 | 26,866,516 |
| Other | 1,104,604 | 1,567,908 | 1,299,672 | 924,674 | 1,083,506 | 1,286,728 | 3,487,782 | 3,799,310 |
| Grand Total | 15,071,155 | 11,565,619 | 7,134,130 | 7,052,781 | 7,781,861 | 8,248,116 | 29,987,146 | 30,665,826 |

Source: Freshwater Fish Marketing Corporation, Annual Report, 1970-1971 (Winnipeg: Freshwater Fish Marketing Corporation, 1971), p. 17.

Table 2

Total Exports of Primary Species: 1968-1971
Quantities in Thousand Pounds

| Exports To | Year 1968 | Year 1969 | Year 1970 | Year 1971 |
|---|---|---|---|---|
| United States | 31,243 | 26,876 | 21,664 | 18,615 |
| Other Countries | 1,013 | 1,482 | 1,833 | 1,528 |
| Total Exports | 32,256 | 28,358 | 23,497 | 20,143 |

Source: Canada, Department of the Environment, Intelligence Services Division, Marketing Services, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Vol. 4, 1972.

## The Marketing System, 1969-1971

Significant changes took place in the marketing system for freshwater fish originating in the provinces now participating in the Freshwater Fish Marketing Corporation. The flow of ownership, physical possession, communication, financing and payment, and risk, had all been altered considerably in hope of achieving the stated objectives of the Corporation. Much of the fragmentation which previously existed within the industry had been eliminated through centralization.

## CHAPTER II

## A COMPARISON OF THE MARKETING SYSTEMS BEFORE AND AFTER THE CREATION OF THE FRESHWATER FISH MARKETING CORPORATION

The objectives of this chapter are: (a) to compare the marketing systems for Canadian freshwater fish before and after the creation of the Freshwater Fish Marketing Corporation; (b) to explain and evaluate the significant differences between the two systems; and (c) to determine the degree to which the Freshwater Fish Marketing Corporation has achieved its stated objectives.

### Methodology

For the purposes of this study, the flow approach[52] provides an organized, expedient methodology for analysis. This methodology has been successfully utilized for the description and analysis of comodity marketing systems both domestic[53]

---

[52]For further discussion of the flow approach, see: George Fisk, Marketing Systems: An Introductory Analysis (New York: Harper and Row, 1967); Eugene D. Jaffe, "A Flow approach to the Comparative Study of Marketing Systems," in Jean Boddewyn, Comparative Management and Marketing (Glenview, Illinois; Scott, Foresman and Company, 1969), pp. 160-170.

[53]Reavis Cox and Charles S. Goodman, "Marketing of House-building Materials," Journal of Marketing Vol. XXI, No. 3 (July, 1956), pp. 36-61.

and foreign;[54] however, no comparative marketing studies were found which used the flow approach.

The flow approach offers several advantages as a comparative marketing analysis technique. One unique characteristic of the approach is the recognition that flows of ownership, physical possession, communications, financing, and risking, do not necessarily follow the same paths from producer to consumer. This separation of flows is especially significant in this particular study. Another advantage of the approach is the ability to determine the structure of marketing systems by showing those agencies that engage in the total marketing effort of delivering goods from producers to consumers. It also provides qualified data as to the relative importance of various institutional groups within the marketing system while at the same time identifying agencies according to function performed rather than establishment classification.[55]

In sum, the flow approach provides a useful methodology to detect, identify, classify, measure, and interpret similarities and differences in the particular mixes of functions, structures, processes, and participants between two

---

[54]Eugene D. Jaffe, Towards A Systems Approach To The Study Of Domestic Marketing Abroad: A Case Study of Isreali Food Distribution (unpublished Ph.D. dissertation, University of Pa., 1966).

[55]Eugene D. Jaffe, "A Flow Approach to the Comparative Study of Marketing Systems," op. cit., p. 170.

or more marketing systems or parts thereof.[56]

A separate analysis is required to determine the degree to which the Freshwater Fish Marketing Corporation has achieved its stated goals. Again, a comparison of the two marketing systems in terms of specific criteria provides the necessary information to make this evaluation. The specific criteria used are as follows:

a. The marketing of fish in an orderly manner.
    1. Stability of prices at each level in the system.
    2. Coordination of activities among channel participants.
    3. Coordination of supply and demand.

b. Increasing returns to fishermen.
    1. Change in prices received by fishermen.
    2. Change in the per cent of export price received by the fishermen.

c. Promoting international markets for, and increasing interprovincial and export trade in, fish.
    1. Domestic promotional programs.
    2. Foreign promotional programs.
    3. Changes in volume of domestic sales.
    4. Changes in volume of exports.

## Sources of Data

The information contained in the Report of Commission

---

[56]Adopted from the definition of comparative marketing proposed by Jean Boddewyn in J. Boddewyn, op. cit., p. 109.

of Inquiry into Freshwater Fish Marketing provides much of the data necessary to describe the marketing system as it existed during the period 1956-1968. Government documents, particularly the Annual Statistical Review of Canadian Fisheries, provide additional statistical information.

The primary sources of data concerning the marketing system as it exists in the later system include The Annual Report(s) of the Freshwater Fish Marketing Corporation, and information received directly from Ray Brooker, Sales Manager, and other Freshwater Fish Marketing Corporation employees during interviews conducted on September 6 and 7, 1972. (Appendix B.) In addition to these interviews, subsequent information was received from Ray Brooker by mail and telephone correspondence.

## Analysis

The analysis which follows summarizes the information which was gathered from the above mentioned sources. First, the two marketing systems are compared in terms of the flows of ownership, physical possession, communications, financing and payment, and risk. Second, the performance of the Freshwater Fish Marketing Corporation is evaluated in terms of its stated objectives.

Ownership

Figure 3 traces the flow of ownership through the marketing system before and after the creation of the Freshwater Fish Marketing Corporation. Before the Corporation was created, the primary flow of ownership was from fishermen to dealer to processor-exporter to United States importer. The primary flow of ownership through the system since the creation of the Freshwater Fish Marketing Corporation is from fisherman to the Corporation to the United States importer. In terms of seller to buyer relationships, the new system has reduced the number by one. While this in itself is not particularly significant, important differences which are a result of this structural change are observable.

The ownership flows of the two marketing systems can be contrasted in terms of the objectives of certain participants, and in terms of the locus of channel control in the respective systems.

Objectives. Before the Corporation was created, dealers and exporters in many cases retained a monopsonistic position in dealings with the fishermen. This was primarily due to the physical setting of the fishery. The McIvor Commission noted that this resulted in an excessive spread between the prices received by the fishermen and the export price. For example, in July of 1965, the export price for dressed pickerel, f.o.b. Winnipeg, was 54 cents per pound, and the price

FIGURE 3a
A COMPARISON OF THE OWNERSHIP FLOWS
1968 (000 Tons)

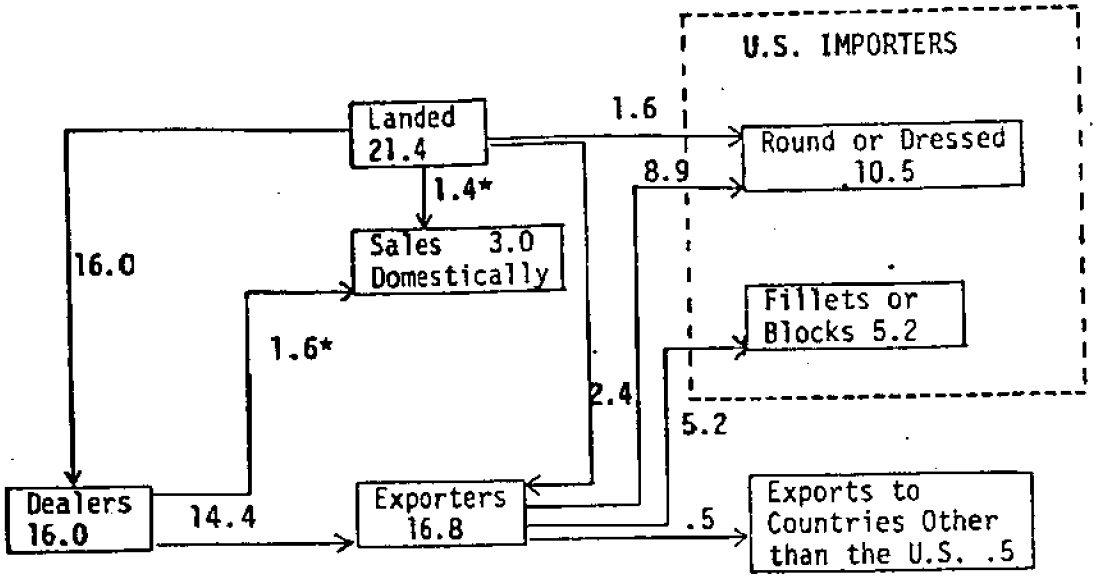
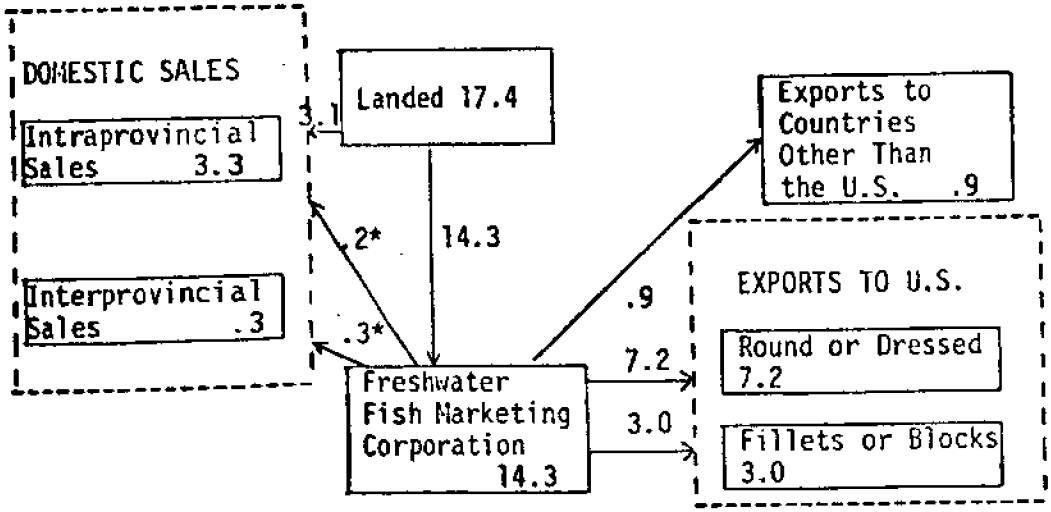



FIGURE 3b
1970-71 (000 Tons)




* Estimated

Source: Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Volume 4, 1972.

dealers received for dressed pickerel was 41 cents per pound. Prices to fishermen at the lake ranged between 16 and 20 cents per pound.[57] At this time, fishermen in Manitoba were receiving less than half of the price paid to dealers and only a third of the price received by exporters. The Commission also found that prices paid to the fishermen were greatly influenced by their individual dependence on dealers and exporters for equipment and supplies.[58]

The Corporation, of course, was established primarily as a result of the depressed economic state and poor bargaining position of the inland fishermen. The foremost objective of the Corporation is to increase returns to fishermen. The Corporation's method of initial payments and pooling arrangements is consistent with this objective. Any increase in export prices is passed back to the fishermen at the end of the fishing season. For example, during the summer of 1969, the initial price to fishermen in Manitoba for pickerel was 28 cents per pound. Fishermen also received a final payment of 7.93 cents per pound at the end of the summer season.[59] The average price paid by United States im-

---

[57]George H. McIvor, op. cit., p. 124.

[58]Ibid., p. 94.

[59]Freshwater Fish Marketing Corporation, Annual Report, 1969-1970, op. cit., pp. 15, 17.

porters for dressed pickerel in 1969 was 60 cents per pound.[60] Total payments to fishermen were 60 per cent of the export value of dressed pickerel.

In the specific example cited above, prices paid to fishermen rose between 80 and 125 per cent while export prices rose only 11 per cent. One of the purposes of the Corporation is to increase returns to fishermen. This one example appears to indicate that this objective has been accomplished.

Channel control. The two marketing systems can also be contrasted in terms of channel control. At the time the Report of Commission of Inquiry Into Freshwater Fish Marketing was compiled, there were less than a dozen importers of round or dressed freshwater fish in the New York market, with five in Detroit and five in Chicago. In Detroit, one firm was reported to control nearly the entire flow of freshwater fish from western Canada, and in Chicago the top two importers controlled 65 and 25 per cent of the freshwater fish business, respectively.[61] Consequently, these importers exerted considerable market control from their relationships both as buyers and sellers. Their position approached that of monopsonist and monopolist in their different markets.

---

[60]See Appendix A, Table 3.

[61]McIvor, op. cit., pp. 89-90.

After the creation of the Freshwater Fish Marketing Corporation, channel control shifted, in part, from the importers to the Corporation. The control importers previously exerted over exporters was primarily a result of the unavailability of other buyers, and the perishable nature of the product. Exporters were rarely in a position to withdraw their offering from the market if the price was too low. The Corporation now sets the selling price for the various species it handles. Since the Canadian fishery provides over ninety per cent of the United States supply of whitefish, pickerel, pike, and sauger, the Corporation has a virtual monopoly on the supply of these species, particularly in fresh form. If importers desire to handle these species, they must buy at the price set by the Corporation. Also, due to the vast storage capacity the Corporation now maintains, it is able to freeze large quantities of fish if it is not sold in fresh form. This method of control exerted by the Corporation does, however, increase costs to the Corporation and reduce the market value of the fish.

Importers still retained considerable control in their role as sellers after the Corporation was created. In fact, the margin between the import price and the retail price of dressed pickerel in Minneapolis rose from approximately 35 cents per pound during the summer of 1965 to approximately 49 cents per pound during the summer of 1969.

Physical Possession

Figure 4 traces the flow of physical possession within the two marketing systems in their respective time periods. In the system which existed prior to the creation of the Freshwater Fish Marketing Corporation the primary flow of physical possession was as follows: fisherman---→dealer---→processor-exporter---→U.S. importer. Superficial obervation might suggest that the only difference between the two systems is that the processing and exporting functions have been separated in the new system. This is true to the extent that the actual change in structure has had little impact on the functions of physical possession performed by those firms which previously participated in the marketing system. Agents still collect, inspect, sort, ice, pack, and disperse fish. Processors still assemble, fillet, freeze, and ship fish. The exporting function has been taken over by the Corporation. Other functions of physical possession which the Corporation has introduced into the system include a planned storage system and advanced processing operations such as breading, cooking, and packaging.

Coordination. The primary difference between the two systems in terms of the flow of physical possession is concerned with coordination of activities among participants. In the earlier system, the high degree of uncertainty as well as the perishable nature of the product produced uncoordinated

FIGURE 4a (1956-1968)
A COMPARISON OF
THE PHYSICAL POSSESSION FLOWS

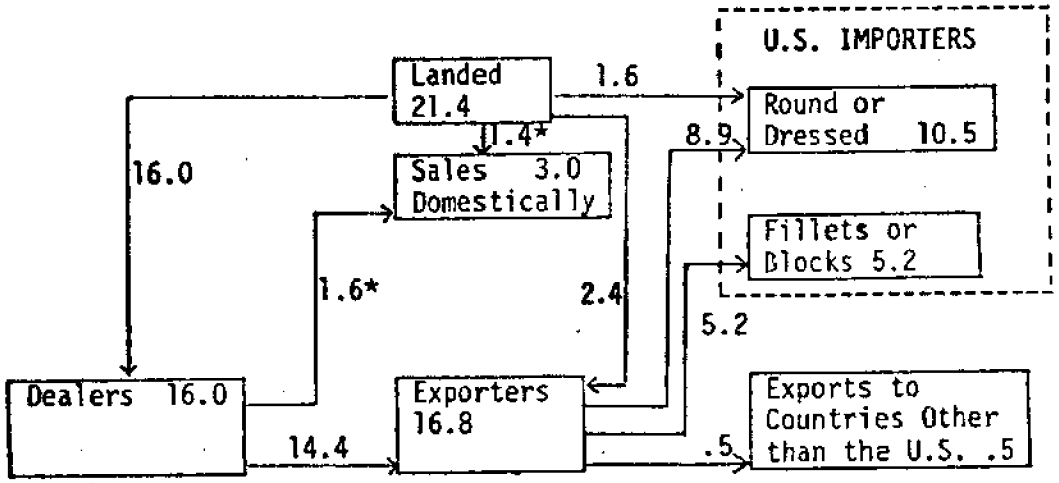
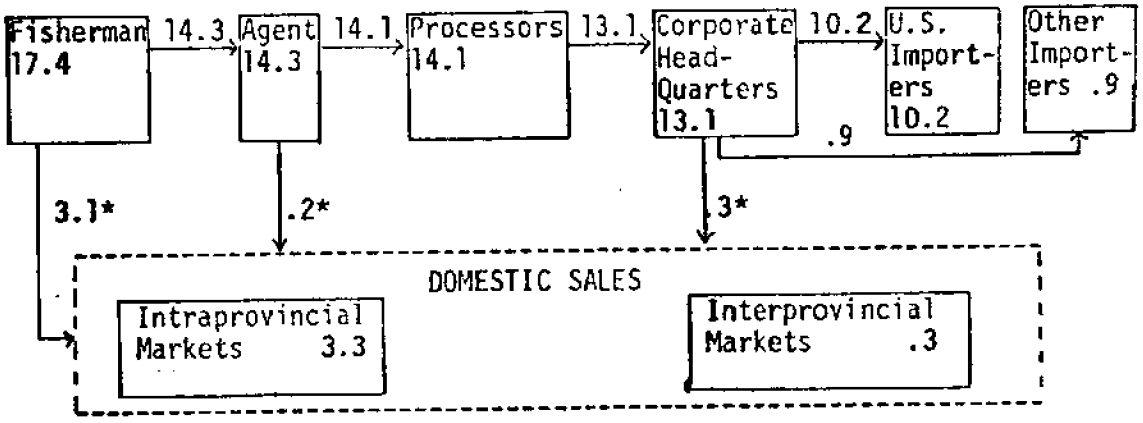



FIGURE 4b (1970-1971)




* Estimated

Source: Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Volume 4, 1972.

behavior among members of the system. Dealers and processor-exporters were continually faced with fluctuating prices and demand. Since they could neither control nor predict price or demand levels over any extended period of time, they engaged in a form of postponement behavior.

> If one views postponement from the point of view of the distribution system as a whole, it may be seen as a device for individual institutions to shift the risk of owning goods to another..... The middleman postpones by either refusing to buy except from a seller who provides next day delivery (backward postponement), or by purchasing only when he has made a sale (forward postponement).[62]

In effect, dealers and processor-exporters were practicing both of these forms of postponement in their dealings with fishermen, importers, and each other. This resulted in a lack of coordination among channel members and added costs to the system due to inefficiencies in collecting, sorting, and dispersing.

Since the Corporation is bound by law to purchase all fish delivered to the Corporation's representatives by licensed commercial fishermen, they are engaging in what Bucklin refers to as speculation:

> The principle of speculation holds that changes in form, and the movement of goods to forward

---

[62]Louis P. Bucklin, "Postponement, Speculation and the Structure of Distribution Channels," Journal of Marketing Research, Vol. 2 (February, 1965), p. 28.

> inventories, should be made at the earliest possible time in the marketing flow in order to reduce the costs of the marketing system.[63]

By engaging in speculation, the Corporation has eliminated to a large extent the uncertainty formerly faced by dealers and processor-exporters. This not only eliminates points of conflict between participants in the system, but also provides an incentive for them to cooperate and coordinate their efforts. As noted in the previous section, a significant change has taken place in the orientation and objectives of some participants of the marketing system. Now that the activities of those participants have been legislated, a higher level of coordination can be achieved.

Communications

Figure 5 indicates that the communications network which now exists is considerably more complex than that which existed in the marketing system prior to the creation of the Freshwater Fish Marketing Corporation. In the earlier marketing system, the flow of communications closely paralleled the flows of ownership and physical possession. The functional counterparts of the agencies which participated in this communications network are still involved in the flow, as well as are several other parties including: zone managers,

---

[63] Ibid., p. 29.

the Advisory Committee, provincial and Federal governmental agencies, and food brokers.

Zone managers. When the Corporation was created, one zone manager was assigned to each of the provinces served by the Corporation. These five zone managers are the primary liason between the Corporation and the fishermen in their respective zones. They are responsible for seeing that all fishermen are familiar with the operations of the Corporation, the schedule of initial prices and pooling arrangements, the opening and closing dates for the fishing seasons, and other matters. Zone managers are also responsible for dealing with the complaints and problems of the fishermen concerning agents, prices, credit arrangements, and any other issues which may directly or indirectly relate to the Corporation. The zone manager also keeps the headquarters staff abreast of the latest developments in the field and the various problems encountered by the fishermen.

Besides his responsibility to the fishermen, the zone manager is also in charge of the landing stations and agents. He performs both supervisory and liaison functions with respect to this group. In sum, the zone manager is the primary communications link between the Corporation and its sources of supply.

The Advisory Committee. A second communications link between the fishermen and the Corporation is the Advisory Committee which is composed of fishermen and/or fishermen's

representatives. The Advisory Committee, consisting of not more than 15 members, is formally charged with the responsibility of advising

> the Corporation on such matters relating to trading and dealing in fish, fish products or fish by-products as are referred to it by the Board (of Directors of the Corporation).[64]

The members of the committee also provide two-way communications between the Corporation and the fishermen. Meetings of the committee provide an opportunity for the fishermen's representatives to examine and criticize the decisions and proposals of management with regard to current and future operations of the Corporation. This also provides a forum for proposals from the committee, such as measures for increasing the involvement of fishermen in the affairs of the Corporation.

Government agencies. Other communications networks have been established between the Corporation and provincial governments and interested Federal government departments. The Corporation provides valuable information to these agencies concerning fishermen's deliveries by species, grade, size, lake licensee, agent and season, which was previously not available.[65] This information reveals not

---

[64]An Act to regulate interprovincial and export trade.., op. cit., p. 8.

[65]Freshwater Fish Marketing Corporation, Annual Report, 1969-1970, op. cit., p. 8.

only new problems faced by the fisheries, but also old problems which were either not recognized or not dealt with properly in the past.

Food brokers. The Corporation has also appointed food brokers, specializing in the distribution to and service of institutional and retail outlets. These brokers deal primarily in the sale of specialty products including precooked breaded, and portion-controlled fish items. The food brokers neither take ownership nor possession of the fish. Their functions include logistics, market exploration and research, personal selling, and feedback.

The most significant communications problems faced by the industry in the earlier period were of an internal nature. Examples include redundant and non-routinized transactions, the lack of predictability of price and demand changes, and the general unawareness among participants of current market conditions.

The Freshwater Fish Marketing Corporation has improved the flow of communications within the industry. This has been accomplished by routinizing buying, selling, and payment transactions within the system, and broadening and formalizing the internal communications network.

Routinizing transactions. By routinizing transactions, much of the uncertainty which previously existed has been eliminated. Fishermen are aware of the initial prices they will receive for the various species, sizes, and grades they

deliver prior to the opening of each fishing season. Likewise, functional middlemen are notified well in advance of any changes in the payment schedule for operations they perform. Buyers also are furnished with price lists which specify the exact price per pound they must pay for the various species, sizes, and grades, and the available product forms. This higher degree of certainty with respect to transactions has added stability and predictability to the system and eliminated much dysfunctional behavior which previously existed within the system.

Formalizing and broadening the communications network. By formalizing and broadening the communications network, the system has also been improved. Important in both of these respects are the Advisory Committee and zone managers. Each serves important roles in the two-way communications between the fishermen and the Corporation. The Advisory Committee further functions as the primary representative of the fishermen in corporate planning and decision-making activities. The absence of any broad based representation of primary producers in the earlier system left them virtually powerless in dealing with other members of the channel.

Utilization of the news media and the efforts of a public relations firm have also broadened the communications network both internally and externally. In the earlier marketing system, promotional activities were only conducted

FIGURE 5a (1956-1968)
A COMPARISON OF THE COMMUNICATIONS FLOW

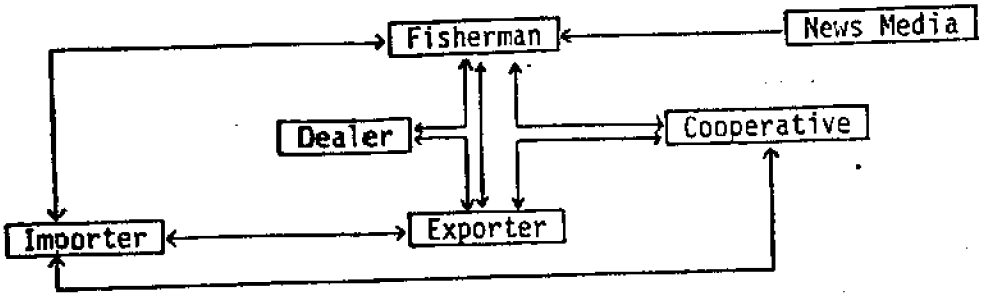
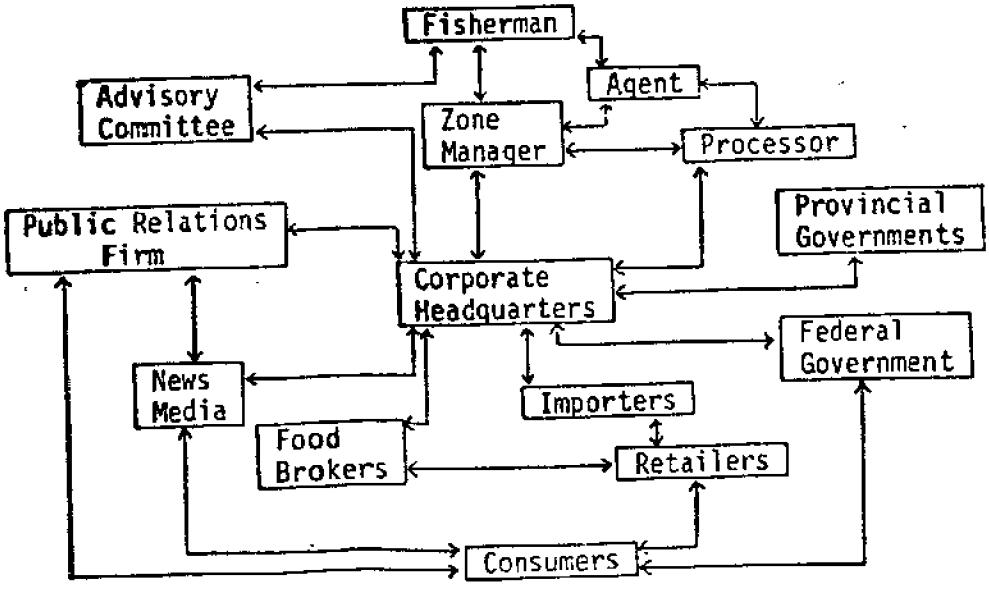



FIGURE 5b (1970-1971)



at the retail level. Now, regular news broadcasts to fishermen are carried throughout the area served by the Corporation. The Corporation is also securing local and national news coverage of its expanding activities and developing programs to educate consumers on such topics as the nutritional value of fish products, menu planning, and methods of preparation. The Corporation also participates in cooperative advertising programs with Canadian and United States retailers. The gathering and disseminating of market information has also been improved by centralizing the communications network and engaging the services of food brokers. With the Corporation as the focal point of the information network, logistical problem solving, and persuasive communications can be coordinated and funneled to the appropriate parties. Food brokers are particularly important in coordinating communications between the Corporation and United States markets, an area which was previously not incorporated into the communications network. The food brokers' knowledge of and contacts with regional institutional and retail markets enables them to gather and disseminate valuable market information as well as to provide a much needed communications linkage between the two segments of the system.

A final problem in the communications network now being resolved is the availability of a data base for governmental agencies which administer the fishery. Under the previous

system, no central source of information was avilable. Now, due to the records required to operationalize the payment system and centralized information network developed by the Corporation, governmental agencies can easily obtain extensive information for planning and regulatory purposes. Information concerning current conditions throughout the participating area is readily available to provincial and federal governmental agencies.

## Financing and Payment

The flows of financing and payment through the two marketing systems can be contrasted in several respects. Figure 6 indicates those agencies directly involved in these flows before and after the creation of the corporation. Central to the analysis of the flows of financing and payment is the determination of the extent to which they perform the same functions and produce the same results in facilitating the movement of fish and fish products through the marketing systems.[66]

Financing. Perhaps the most important comparison to be made in the flow of financing is that of the functions performed by financing in the two marketing systems. As dis-

---

[66]Reavis Cox, "The Search for Universals in Comparative Studies of Domestic Marketing Systems", in P. D. Bennett (ed.) Marketing and Economic Development: Proceedings of the Fall 1965 Conference (Chicago: American Marketing Association, 1965), p. 156.

cussed previously in this chapter, the objectives of certain participants in the marketing systems can be sharply contrasted. This difference also affects the functions performed by financing. In the earlier system, a primary objective of dealers and exporters providing financing to fishermen was to maintain a high degree of control over their sources of supply. By extending credit to the fishermen, they were able to do this. On the other hand, the primary objective of the Corporation is to increase returns to fishermen. In this case, financing is merely a facilitating function to assist in the movement of the product from producer to consumer.

Payment. The flows of payment through the respective systems can also be contrasted in several ways. In the earlier marketing system, the flow of payment followed the same path as the flows of ownership and physical possession, the only difference being the direction of the flows. In the current system, the flow of payment within the two systems can be grouped as follows: those concerning payment to primary producers; those concerning payment to Canadian middlemen; and those concerning functions performed by the payment flows.

Payment to primary producers in the earlier system was erratic and highly uncertain. Prices flucuated considerably during the fishing season and among adjacent lakes

FIGURE 6 a (1956-1968)
A COMPARISON OF
THE FINANCING AND PAYMENT FLOWS

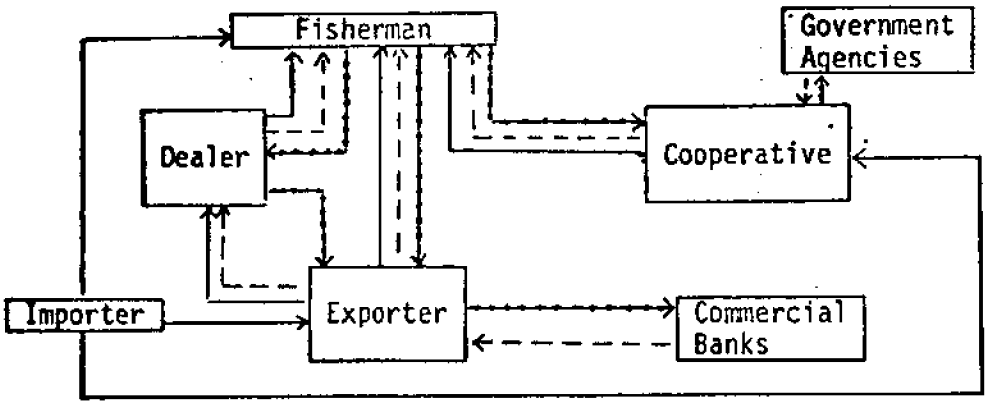
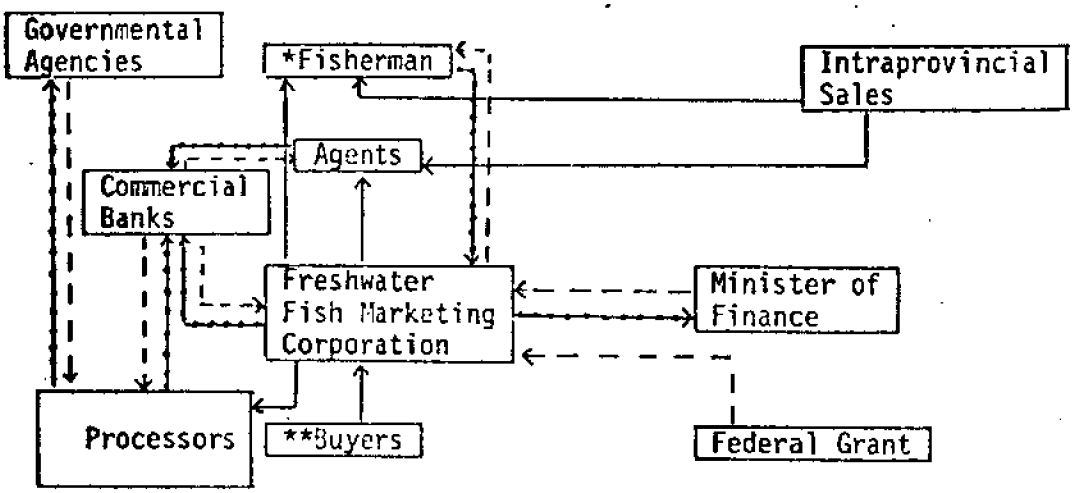



FIGURE 6 b (1970-1971)




_____ Payment Flow

_ _ _ _ _ _ Financing Flow

. . . . . Repayment Flow

* Fishermen are paid and financed by the Corporation through its agents

** Buyers include all domestic and foreign parties purchasing fish and/or fish products from the Corporation.

at any given time. Prices were often not established until fish was resold. Payment was often delayed. Fishermen were typically not relieved of the uncertainty associated with price changes and perishability until the fish was exported. The delayed payment arrangement also meant that fishermen were in effect extending non-interest credit to middlemen, thus virtually eliminating the middleman's inventory costs.

Payment arrangements to fishermen in the system which now exist are completely different, and considerably more equitable to the fishermen. The system of initial payments established prior to the opening of each fishing season and pooling arrangements has several benefits to the fisherman. These include immediate payment upon the delivery of fish, elimination of fluctuations in prices, a reduction and a sharing of uncertainty associated with changing market conditions, and relief from the residual risks associated with ownership and physical possession which were previously retained until fish were exported.

Canadian middlemen in the earlier system were also plagued by many of the same problems facing the fishermen. Exporters and dealers were often unaware of the prices they would receive prior to delivery and were held responsible for shortage, spoilage, and similar conditions, regardless of who was responsible for the losses or deterioration. The main difference between these participants and fishermen was

that the former were able to pass this uncertainty on to other members of the system while the latter were not able to do so.

As Figure 6b indicates, the flow of payment through the current marketing system does not follow the path of ownership or physical possession. Canadian middlemen, as well as primary producers, are paid directly by the Corporation. Payment schedules are developed prior to each fishing season and are designed to reflect anticipated market conditions as well as the values of the various functions performed by the participants. The only risk associated with payment assumed by functional middlemen is assuring that proper quality control is maintained and that deterioration does not take place while fish is in their possession.

Payment arrangements between United States importers and the Corporation are also considerably different from those which previously existed between exporters and importers. The Corporation now establishes prices, terms of sale, and similar matters which were previously determined somewhat arbitrarily by importers.

The most important question again to be asked is "How do the functions performed by payment in the two systems differ, and what are the results of these differences?" In the relationships between primary producers and Canadian middlemen, it is clear that the ex post facto pricing and delayed

payment arrangements performed the function of shifting risk from and reducing inventory costs to the middlemen. In contrast, the pricing and payment arrangements developed in the current system perform both a facilitating function in the movement of goods and a means whereby a certain amount of the risk of price changes can be shared by all fishermen.

The relationships between Canadian exporter and dealers in the earlier system also performed the functions of shifting risk backwards in the system, resulting in internal inefficiencies and dysfunctional relationships among participants. In the current marketing system, payment is predetermined, based primarily on operations performed. Functional middlemen can increase their profits by improving their individual efficiency which ultimately results in a more efficient system. Also through better coordination among participants, a higher degree of efficiency can be obtained.

The dominant market position of United States importers in the earlier system also permitted them to retain gains from favorable market developments and pass on losses from unfavorable developments to Canadian exporters by way of pricing and payment arrangements. This also performed the function of shifting risk with the result being inefficient collecting, sorting, and dispersing practices by both parties.

Risk. Perhaps the most outstanding characteristic of the marketing system for the Canadian inland fishery prior to the creation of the Freshwater Fish Marketing Corporation was the high degree of uncertainty which existed in the industry, particularly the Canadian segment. Especially noteworthy is the inordinate proportion of this uncertainty borne by the fishermen. The report of the McIvor Commission emphasized that this high degree of uncertainty and the powerful market position of the United States importers were primary factors contributing to the weakness in export prices, bargaining position of fishermen and exporters, and the overall inefficiency of the Canadian segment of the industry. Consequently, many of its recommendations were designed to redistribute the risk inherent in the industry. The Commission concluded that implementation of its recommendations would result in an improvement of the bargaining power of the Canadian segment of the industry, a reduction in costs and elimination of some inefficiencies, an extension of market potential of the fishery, and increased earnings to the fishermen.[67]

The act which created the Freshwater Fish Marketing Corporation included many of the recommendations of the McIvor Commission. It is, therefore, not surprising that the flows of risk through the two marketing systems are so different. Figure 7a traces the flow of risk from producer to

---

[67] Ibid., p. 17.

United States importer in the earlier system. As indicated, dealers and exporters were able to hedge their risk by delaying payment to fishermen until they received payments from the importers. Importers likewise were able to shift risk both forward and backwards to other participants in the marketing system. Figure 7b shows that, in the current system, there are two primary flows of risk, one flow following the path of ownership, the other following the path of physical possession.

Contrasts in the flow of risk through the two marketing systems are readily apparent. These include risks associated with price, demand, quality, and financing and payment. Several of the differences in these flows have been discussed already in this chapter. The question which now arises is, "What is the impact of these differences on the operations and performances on the marketing system?" The remainder of this section deals with these issues.

The primary result of the changes which have taken place in the flow of risk has been a redistribution risk within the industry. Uncertainty has been reduced to the fisherman as a result of the establishment of stable prices determined in advance of each fishing season. The fishermen are also now relieved of the inherent risks of ownership and physical possession upon delivery of their catch to authorized agents of the Corporation. As previously noted,

FIGURE 7a (1956-1968)
A COMPARISON OF THE RISK FLOWS

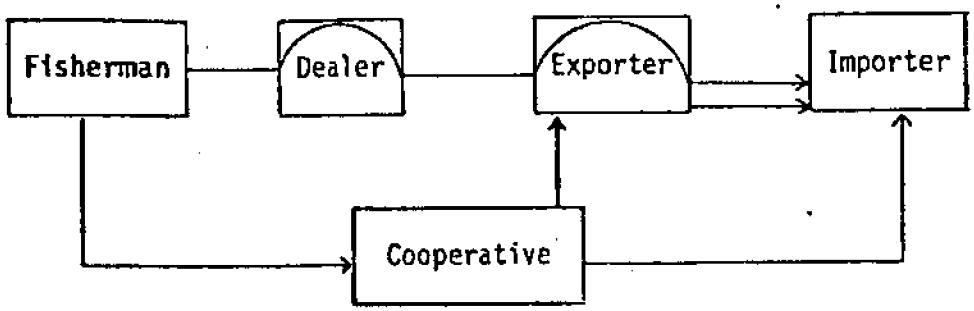
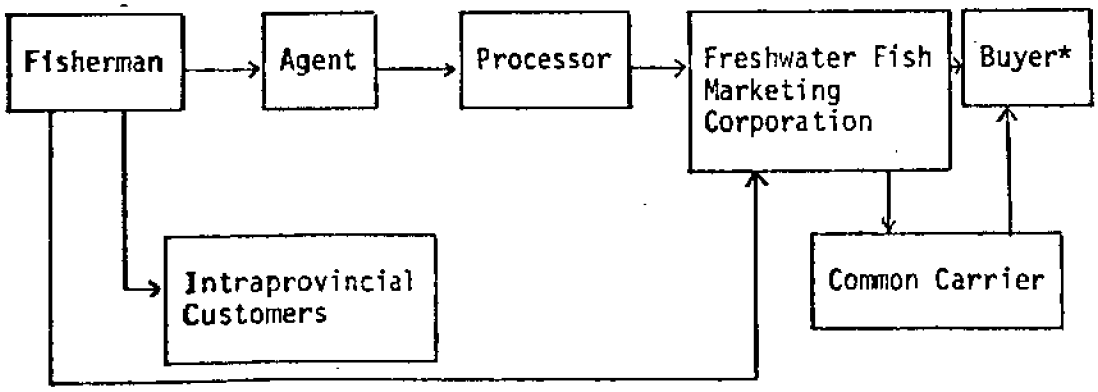



FIGURE 7b (1970-1971)




Participant takes title and possession but does not assume risk of price changes.

*Buyers include all domestic and foreign parties purchasing fish and/or fish products from the Corporation.

this was not the case in the earlier system. The knowledge that prices for his catch will not vary from day to day or dealer to dealer provides the fisherman an opportunity to utilize his time and effort in a more efficient manner.

Risk of price changes and fluctuating demand have also been eliminated for Canadian middlemen. Although they are held responsible for assuring that deterioration does not take place while fish is in their possession, the high degree of uncertainty which previously resulted in inefficient handling and processing and the lack of coordination among participants have been reduced. Middlemen now know they will receive uniform allowances for the various operations they perform regardless of changes in market conditions.

The Corporation now assumes the risks associated with changes in market condition, financing fishermen, and physical deterioration while fish is in its possession. The Corporation, by virtue of its control over supply, now establishes conditions of sale which transfer risk associated with changes in market conditions and physical deterioration to buyers, including United States importers, after the fish has been shipped. The net impact of the changes which have taken place in the flow of risk through the marketing system has been a strengthening of the bargaining power of the Canadian segment of the industry and a redistribution of risk within the system.

As noted previously, the objectives of the Freshwater Fish Marketing Corporation are: (a) the marketing of fish in an orderly menner; (b) increasing returns to fishermen, and (c) promoting international markets for, and increasing interprovincial and export trade in, fish. Although data are limited to the first three years of operation, it is worthwhile to examine the degree to which these objectives, as specifically listed in the Act, have been achieved.

## Marketing Fish in an Orderly Manner

The criteria used to measure the Corporation's success in achieving its first objective, marketing fish in an orderly manner, are: (a) stability of prices at each level in the system; (b) coordination of activities among participants; and (c) coordination of supply with demand. Again, a comparison of the two marketing systems is used to make this evaluation.

The issue of stability of prices before and since the creation of the Freshwater Fish Marketing Corporation has been discussed previously in this chapter. In the earlier system, prices paid to fishermen fluctuated considerably during any fishing season and also among adjacent lakes for fish landed in the same day. It was even found that prices paid to fishermen were influenced by their individual dependence on exporters for supplies and equipment. The Canadian middleman also experienced highly fluctuating price patterns;

he was able, however, to pass much of the accompanying uncertainty on to other middlemen and the fishermen. This instability of prices compounded the high degree of risk and uncertainty inherent in the industry and led to postponement behavior on the part of middlemen resulting in inefficient operations and dysfunctional relationships among participants. Due to the weakness of the bargaining position of the fishermen, the costs of these inefficiencies were ultimately passed back to them.

In the current marketing system, prices are established in advance of each fishing season. Fishermen, agents, and processors, all know prior to the opening of a fishing season the prices they will receive for performing their various functions. Parties interested in purchasing fish from the Corporation are also notified well in advance of any price changes.

By stabilizing prices and agreeing to purchase all fish delivered to its representatives, the Corporation has reduced the level of uncertainty to all participants in the Canadian segment of the marketing system. This has led to internal stability and predictability which has contributed to the orderliness of the marketing system.

The McIvor Commission noted that

> the lack of coordination between supply and demand, in other words disorderly marketing by exporters, increases further

> the uncertainty arising from the irregular patterns of demand.[68]

Although the Corporation can not change the irregular demand or supply patterns which exist, it has been able to implement strategies to better coordinate supply with demand. Perhaps the most important of these strategies has been the establishment of a single buying and selling organization for the fishery. With the Corporation as the nucleus of the distribution system, current production and market conditions can be simultaneously analyzed. This information is extremely valuable for processing and product planning decisions designed to coordinate supply with demand.

Complementing the centrally-directed distribution system is the broadened and formalized information network which is also designed to assist in the coordination of supply with demand. Fishermen, the Corporation, governmental regulatory agencies, and buyers are now better able to gather and disseminate market information in an orderly manner.

Two other strategies are now being pursued to better coordinate supply with demand. First, because of the size and volume of fish handled by the Corporation, it has been able to invest in extensive processing equipment and cold storage capacity. Second, the Corporation has developed new

---

[68] Ibid., p. 7.

product forms and uses for species which were previously underutilized. These strategies have permitted the Corporation to extend current markets, develop new markets, and avoid "distress" selling which exporters previously engaged in when supply exceeded demand or they became short of working capital. These strategies were previously not attempted by Canadian middlemen primarily because of the capital investment required.

In sum, the Corporation has been successful in achieving its objective of marketing fish in an orderly manner. This has been achieved primarily by: (a) stabilizing prices, thereby redistributing risk and uncertainty related to changing market conditions; (b) broadening and formalizing the communications network to provide better knowledge of market conditions; and (c) coordinating supply with demand in a centrally-directed manner.

## Increasing Returns to Fishermen

Three criteria have been selected to evaluate the Corporation's efforts to increase returns to fishermen. These criteria are: (a) changes in average prices received by fishermen for the combined landings of the five primary species; (b) changes in average prices received by fishermen for the combined landings of all species; and (c) changes in the per cent of export price paid to fishermen.

Prices received by fishermen

Prices received by fishermen, which are best measured in terms of real landed price per pound,[69] can be analyzed both by specie and by province. Since the primary concern is to determine if fishermen are receiving greater overall returns per pound in the total area under the jurisdication of the Freshwater Fish Marketing Corporation, changes in prices for particular species or in specific provinces will not be considered.[70] Therefore, analysis will be restricted to (a) the average real prices per pound received by fishermen for the combined landings of the five primary species in the participating provinces, and (b) the average real prices per pound received by fishermen for all species landed in the participating provinces.

In order to determine if landed value per pound increased following the creation of the Corporation, the following null hypotheses were tested:

1. The average real price per pound paid to fishermen for the combined landings of pickerel, sauger, trout, and whitefish harvested in Ontario, the prairie provinces, and the Northwest Territories was not higher following the establishment of the Freshwater Fish Marketing Corporation than before it was created.

---

[69]Real prices in this case are calculated by dividing current dollar prices by the general wholesale price index.

[70]Values necessary to calculate changes in prices for particular species or in specific provinces are provided in Appendix A, Tables 1 and 2.

2. The average real price per pound paid to fishermen for the combined landings of all species harvested in Ontario, the prairie provinces, and the Northwest Territories was not higher following the establishment of the Freshwater Fish Marketing Corporation than before it was created.

Defining $\mu_1$ as the mean real price per pound paid to fishermen for the combined landings of the five primary species of Ontario, the prairie provinces, and the Northwest Territories before the Corporation was established, and $\mu_2$ as the mean real price per pound paid to fishermen for the combined landings of the five primary species in Ontario, the prairie provinces, and the Northwest Territories after the Corporation was created, the first null hypothesis can be stated $H_o: \mu_1 - \mu_2 \geq 0$, with the associated alternative hypothesis $H_1: \mu_1 - \mu_2 < 0$. Similarly, defining $\mu_3$ as the mean real price per pound paid to fishermen for the combined landings of all species in Ontario, the prairie provinces, and the Northwest Territories before the Corporation was established, and $\mu_4$ as the mean real price per pound paid to fishermen for the combined landings of all species in Ontario, the prairie provinces, and the Northwest Territories after the Corporation was created, the second null hypothesis can be stated $H_o: \mu_3 - \mu_4 \geq 0$, with the associated alternative hypothesis $H_1: \mu_3 - \mu_4 < 0$.

The t-test of the difference between two means was used to test the null hypotheses. The assumptions of this test

are: (a) the real prices are random variables from normal populations, and (b) the variances of the parent populations are equal. In this case, a further assumption must be made: namely, that neither the means nor the variances of the parent populations are a function of time. This assumption is supported by the results of multiple regression analysis which indicated that time trend, price in the previous year, and landed pounds were all poor predictors of the average real price of fish for any given year.

To test the two null hypotheses, the appropriate mean real price for the three years prior to the establishment of the Corporation was compared to the mean real price for the three years after establishment of the Corporation. Therefore, each test had four degrees of freedom.

As Table 3 shows, the first null hypothesis could be rejected at the 0.148 level of significance. This indicates that the change in average real price per pound paid to the fishermen for the combined landings of the five primary species after the Corporation began operations is not statistically significant at a reasonably low level of significance. Therefore, the null hypothesis $\mu_1-\mu_2 \geq 0$ cannot reasonably be rejected. In other words, it cannot be concluded that the average real price per pound fishermen received for the five primary species increased after the Corporation was established.

TABLE 3

RESULTS OF t-TEST*

| | $\bar{X}_1$ | $\bar{X}_2$ | $s_{\bar{X}_1-\bar{X}_2}$ | Computed t | Significance probability** |
|---|---|---|---|---|---|
| Average real price per pound for the five primary species | 7.15 | 7.51 | .300 | -1.20 | 0.148 |

| | $\bar{X}_3$ | $\bar{X}_4$ | $s_{\bar{X}_3-\bar{X}_4}$ | Computed t | Significance probability** |
|---|---|---|---|---|---|
| Average real price per pound for all species | 4.36 | 5.13 | .169 | -4.55 | 0.005 |

*Values used to compute $\bar{X}_1$, $\bar{X}_2$, $\bar{X}_3$, and $\bar{X}_4$ can be found in Appendix A, Tables 4 and 5.

**Significance probabilities reported in Table 2 correspond to the minimum levels of significance for which the associated null hypotheses could be rejected.

$\bar{X}_1$ = the sample mean of average real prices per pound for the primary species for the three year period before the Corporation was created.

$\bar{X}_2$ = the sample mean of average real prices per pound for the primary species for the three year period after the Corporation was created.

$\bar{X}_3$ = the sample mean of average real prices per pound for all species for the three year period before the Corporation was created.

$\bar{X}_4$ = the sample mean of average real prices per pound for all species for the three year period after the Corporation was created.

$s_{\bar{X}_a-\bar{X}_b}$ = the estimated standard error of the difference between the two means.

Table 3 also shows that the second null hypothesis could be rejected at the 0.005 level of significance. This indicates that the change in average real price per pound paid to the fishermen for the combined landings of all species after the Corporation began operations in 1969 is statistically significant. Therefore the alternative hypothesis $\mu_3-\mu_4<0$ is to be accepted. In other words, it can be concluded that the average real price per pound paid to fishermen for species other than the five primary species increased after the Corporation was created.

A possible explanation of why average real prices increased for other species, but not for the five primary species, is that species of fish previously not commercially exploited are now being introduced on the market in new product forms. These essentially new products command a higher market price which can ultimately be passed back to the fishermen.

This explanation, although tentative, is supported by information previously presented. For example, prior to the creation of the Corporation, processing operations in the industry were limited to simple filleting. The Corporation, on the other hand, has invested in expensive, sophisticated machinery and equipment which is capable of performing a variety of technologically advanced processing operations. This new production capacity combined with large, modern cold

storage facilities and the Corporation's expansion into the convenience food market has made the underutilized species more desirable, thus more profitable to the fishermen. The five primary species, which were previously considered the mainstay of the industry, have continued to be marketed primarily whole and filleted. Since these products are marketed in essentially the same form as before the Corporation was created, their real price per pound has not increased.

Per cent of export prices paid to fishermen

The third criterion selected to evaluate the Corporation's efforts to increase returns to fishermen is a comparison of the per cent of export prices paid to fishermen before, and after the Corporation began operations.

For the three year period prior to the creation of the Corporation, fishermen in the participating provinces received an average of 67.4 per cent of the export price of fish. In other words, the per cent of export prices paid to the fishermen decreased slightly after the Corporation was created.

Promoting International Markets For, and Increasing Inter-Provincial and Export Trade In, Fish

Due to the drastic decrease in production in 1970 and 1971, resulting primarily from the closure of several impor-

tant commercial fishing lakes, it is difficult to evaluate the impact of the Corporation in either promoting markets for, or increasing trade in, fish. In terms of promotional efforts, the Corporation has introduced many innovations into the marketing system. Although the success of these programs cannot be measured at this time, several deserve mention.

Promotion. Domestic promotional programs for which the Corporation is responsible include engaging the services of a public relations firm, securing local and national news coverage of its activities, media advertising, and cooperative advertising with retailers. The Corporation also encourages its agents to develop local markets by offering fresh fish at ten per cent below the Corporation's selling price.

In order to better promote international markets for Canadian freshwater fish, the Corporation has introduced several new product forms primarily designed for the convenience food market. These include Fischimos (fish sticks), steaks, and portion-controlled items which are sold breaded, cooked, and tray packed. To complement these efforts, the Corporation has retained food brokers which specialize in distribution to institutional and retail outlets. The cooperative advertising program is also available to retailers located in foreign markets.

Increasing trade. Although the reduction in commercial landings precludes accurate measurement of the Corporation's success in increasing trade in fish, several noteworthy observations are possible.

Domestic trade in the five major species rose from approximately 6,000,000 pounds in 1968 to approximately 7,200,000 pounds during the 1970-1971 season.[71] This represents a substantial increase in domestic sales; more emphasis is needed in this area if the industry is to reduce its dependency on the United States market.

Several reasons have been given for the relatively low level of Canadian consumption of commercially harvested freshwater fish. McIvor stated that:

> domestic consumption of commercially produced freshwater fish is not significant for the freshwater fish industry, partly because many Canadians who prefer freshwater fish catch their requirements themselves, having relatively easy access to lakes and rivers, and partly because of the availability of lower priced seafish.[72]

The first part of this argument, that Canadians who prefer freshwater fish catch their requirements themselves, may have been valid in the past. Now the majority of the population lives in urban areas where sport fishing oppor-

---

[71]See Figure 2, p.

[72]George H. McIvor, op. cit., p. 4.

tunities are not readily available. Likewise, the second part of McIvor's argument, that domestic consumption of commercially produced freshwater fish is not significant because of the availability of lower priced seafish cannot be justified for all species, particularly in the inland regions of the country.

In other words, domestic market opportunities have been traditionally overlooked. The development of this potential market is now the responsibility of the Freshwater Fish Marketing Corporation. Although progress has been made in the area of increasing domestic trade in fish, more attention is needed to develop this market more fully.

In the area of export trade in fish, the Corporation has increased exports of the five major species to countries other than the United States. In 1969, 1970, and 1971, exports to countries other than the United States were 46, 81, and 50 per cent respectively, above the 1968 level.[73]

In sum, the Corporation has implemented programs for both promoting markets and increasing trade. Coinciding with the decline in commercial landings was an increase in domestic sales, and sales to countries other than the United States.

---

[73]See Appendix A, Table 3.

## Summary

In this chapter, the two marketing systems were compared in terms of their structural and functional characteristics. The Corporation's performance was also evaluated in terms of its stated objectives. It was found that the Corporation has been extremely successful in achieving its first objective, marketing fish in an orderly manner. Preliminary indications are that the Corporation has been only moderately successful in achieving its second objective, increasing returns to fishermen. Landed value per pound has generally increased; however, it has not increased significantly for the five primary species. The Corporation's performance in achieving its third objective, promoting international markets for, and increasing interprovincial and export trade in, fish cannot be accurately measured at this time due to the substantial reduction in commercial landings in 1970 and 1971; domestic sales and exports to countri other than the United States, however, have increased.

# CHAPTER III

# IMPLICATIONS AND RESEARCH RECOMMENDATIONS

This longitudinal study of the Freshwater Fish Marketing Corporation of Canada was undertaken to gain some insight into how a producer cooperative organization might aid in establishing more orderly marketing procedures. Such procedures should lead to greater efficiency and, hence, a greater return to all members of the distribution channel. Chapters I and II have provided the background of the Canadian freshwater fishing industry, the establishment of the Corporation, and an analysis of the industry before and after the inception of the Corporation.

As do all studies, this one gives rise to certain implications for the Canadian industry, for the Corporation, and other countries' fishing industries. This chapter deals with these implications and also presents other related areas that might be the subjects for later research.

## Implications

Many fishermen have benefited from the creation of the Freshwater Fish Marketing Corporation. Perhaps the most significant benefit the fishermen have received from the current marketing system is a reduction in uncertainty.

This includes uncertainty associated with prices and payment, ownership and physical possession, and demand. The Corporation's strategy of improving the orderliness of the marketing system has been a primary factor in facilitating this change. The fishermen have also benefited from the Corporation's development of markets for previously underutilized species. Prices paid the fishermen for these species have increased considerably as a result of advanced processing techniques that the Corporation has introduced. Also, average landed value per pound for total landings of all species has increased significantly since the creation of the Corporation. Finally, the fishermen now have a voice in the planning and decision-making activities of the fishery by means of the Advisory Committee.

Two areas are apparent where the fishermen are not better off than they were previously. Landed value per pound for the five primary species has not significantly increased since the creation of the Corporation, and the per cent of the export price received by the fishermen has not increased. The available data fail to suggest why these benefits have not been forthcoming.

The implications of this study to the Canadian government, the Corporation, and its representatives are that the current system has made extraordinary progress in some areas,

while other areas deserve more attention. By far, the greatest achievement of the Corporation has been in the area of orderly marketing. Considerable attention has been given to the Corporation's performance in terms of this objective in previous chapters. The second most important achievement of the Corporation has been in the area of advanced processing technology. Payoffs from technological innovations have been observed in the development of new product forms, markets for previously underutilized species, and better coordination of supply with demand.

In the area of increasing returns to fishermen, the Corporation has only been moderately successful. Average landed value per pound for the combined landings of all species has increased significantly since the creation of the Corporation; however, the average landed value per pound for the five primary species has not increased. The findings of this study indicate improvement in this area is needed. Finally, the impact of the Corporation's efforts in the areas of promoting international markets for, and increasing trade in, fish is difficult to measure at this time due to decreases in commercial production which began in 1970; however, domestic sales and exports to countries other than the United States have increased since the Corporation was created. It has been noted that domestic market opportunities deserve more attention.

Implications of this study to other countries, or national or regional groups contemplating collective marketing of fish are many. These findings are relevant to fishermen interested in organizing a cooperative; cooperatives contemplating the formation of a federation of cooperatives; and governments considering the feasibility of creating a fisheries monopoly. Common motivations to create such organizations include excessive price fluctuations, weakness of prices at the primary producer level, and/or insufficient storage and processing facilities. All of these factors were present in the Canadian system prior to the creation of the Freshwater Fish Marketing Corporation.

Perhaps the most significant implication of the findings of this study to any of the above groups is that an organized, orderly marketing system can be achieved through the establishment of an economic superstructure serving the individual economic units. The degree to which such a superstructure can affect organized, orderly marketing may well be a function of its economic power, derived from its size and magnitude of resources. For the purposes of this study, orderly marketing has been measured in terms of (a) stability of prices at each level in the system (b) coordination of activities among participants, and (c) coordination of supply with demand.

Another benefit which can be realized from the establishment of a fishery superstructure, as has been demonstrated by the Freshwater Fish Marketing Corporation, is the ability to introduce advanced technological processes. In order for a marketing system to implement technological processes, new product forms can be developed. Underutilized species can become economically feasible both for human consumption and industrial use. Likewise, fish parts, considered by many to be waste, can be processed for further use. Other benefits which can be achieved through collective marketing include more economical use of facilities, and increased adaptability to the market through centralized decision-making and information networks.

## Research Recommendations

The scope of this study was to compare the Canadian freshwater fish marketing systems before and after the creation of the Freshwater Fish Marketing Corporation. Since the research was essentially a case study, generalizations can not be made concerning; (a) the structure and organization of the Corporation; (b) fishing industry activities elsewhere; (c) the Corporation's effect on employment; (d) staffing decisions made by the Corporation; and (e) uses and markets for underutilized species of fish. Such a situation leads to recommendations for further research.

Structure and Organization

Since there are other types of fishery cooperative organizations in the United States and elsewhere, other forms should be studied to determine possible future moves towards more orderly marketing as opposed to apparently fragmented supply activities which currently exist in the industry.

Fishing Industry Activities Elsewhere

Feasibility studies should be conducted in the United States and elsewhere to determine which, if any, of the strategies implemented by the Freshwater Fish Marketing Corporation are applicable in other segments of the fishing industry.

Also, a study should be conducted to determine the impact that the Freshwater Fish Marketing Corporation has had on the United States segment of the distribution system. It is conceivable that many gains made by the Canadian segment of the system may have been offset by losses incurred by the United States segment of the system. If this is the case, the system, and especially the consumer, may be no better off than under the previous disintegrated system.

Employment

Further study is needed to determine the impact the Corporation has had in the area of employment. Available data indicate that employment in the inland fishing industry

has fallen from approximately 15,000 persons before the Corporation was created to 11,000 persons in the years since it began operations.[73] Although the number of persons employed in fish processing plants has increased slightly, the number of commercial fishing licences issued has decreased substantially. It is not clear to what extent the Corporation has been responsible for this decrease. Factors such as the decline in commercial landings and alternative employment opportunities may also have affected the number of persons fishing commercially. Likewise, no data were available to indicate the number of middlemen eliminated from the marketing system.

Staffing

No effort was made in this study to determine the dysfunctional aspects of the Corporation's decision to, when possible, retain those individuals and firms previously employed in the industry as dealers and processors. It was not determined to what extent the incentives provided by the Corporation were effective in bringing about changes in attitudes, procedures, and patterns of behavior. The

---

[73]Annual Statistical Review of Canadian Fisheries, Vol. 4 (Ottawa, Ontario: Intelligence Services Division, Marketing Services Branch, Fisheries Service, 1972), p. 18.

finding that the per cent of export prices returned to the fishermen has not increased suggests that this may be an area of weakness in the marketing system. It is recommended that further research be conducted in this area.

Underutilized Species

The findings of this study have demonstrated that uses and market for underutilized species can be exploited in an economically feasible manner. In a time of dwindling natural resources, it is imperative that those remaining resources be utilized to their maximum potential. It is, therefore, recommended that concentrated investigations be undertaken to determine the availability and possible uses for what now are considered underutilized species of fish.

This study has laid a foundation for creating organizations for more orderly marketing of fish. The recommendations, if implemented, would increase the understanding of the Freshwater Fish Marketing Corporation and similar organizations as to how greater efficiency may be achieved. The suggested studies might then be used as a point of departure for research that might lead to decisions that might provide greater sources of supply and larger markets.

# APPENDIX A

# TABLES

TABLE 1

FRESHWATER FISH LANDINGS AND VALUES IN ONTARIO, PRAIRIE PROVINCES, NORTHWEST TERRITORIES: 1956-1971

PROVINCE: ONTARIO

| Year | Landings | Landed Value | Landed Value Per Pound | Export Value | Export Value Per Pound | Landed Value As Percent of Export Value |
|---|---|---|---|---|---|---|
| 1956 | 59,710 | 7,927 | 13.3 | 8,919 | 14.9 | 88.9 |
| 1957 | 51,109 | 7,046 | 13.8 | 7,928 | 15.5 | 88.9 |
| 1958 | 47,175 | 7,271 | 15.4 | 8,180 | 17.3 | 88.9 |
| 1959 | 48,984 | 4,866 | 9.9 | 5,475 | 11.2 | 88.9 |
| 1960 | 47,600 | 4,983 | 10.5 | 5,606 | 11.8 | 88.9 |
| 1961 | 54,951 | 5,745 | 10.5 | 6,464 | 11.8 | 88.9 |
| 1962 | 63,780 | 5,341 | 8.4 | 6,009 | 9.4 | 88.9 |
| 1963 | 54,342 | 5,498 | 10.1 | 6,192 | 11.4 | 88.8 |
| 1964 | 43,508 | 5,222 | 12.0 | 5,875 | 13.5 | 88.9 |
| 1965 | 52,468 | 6,402 | 12.2 | 7,202 | 13.7 | 88.9 |
| 1966 | 56,344 | 5,995 | 10.6 | 6,744 | 12.0 | 88.9 |
| 1967 | 54,656 | 5,988 | 11.0 | 6,738 | 12.3 | 88.9 |
| 1968 | 55,707 | 5,968 | 10.7 | 6,717 | 12.1 | 88.8 |
| 1969 | 63,205 | 7,389 | 11.7 | 8,313 | 13.2 | 88.9 |
| 1970 | 46,081 | 6,535 | 14.2 | 7,352 | 16.0 | 88.9 |
| 1971 | 39,853 | 6,351 | 15.9 | 7,145 | 17.9 | 88.9 |

TABLE 1--Continued

PROVINCE: MANITOBA

| Year | Landings | Landed Value | Landed Value Per Pound | Export Value | Export Value Per Pound | Landed Value As Percent of Export Value |
|---|---|---|---|---|---|---|
| 1956 | 30,397 | 2,947 | 9.7 | 6,426 | 20.2 | 45.9 |
| 1957 | 31,571 | 3,279 | 10.4 | 5,929 | 18.8 | 55.3 |
| 1958 | 31,929 | 3,540 | 11.1 | 6,844 | 21.4 | 51.7 |
| 1959 | 31,052 | 3,757 | 12.1 | 6,689 | 21.5 | 56.2 |
| 1960 | 31,944 | 3,867 | 12.1 | 7,035 | 22.0 | 55.0 |
| 1961 | 30,658 | 3,174 | 10.4 | 6,214 | 20.3 | 51.1 |
| 1962 | 36,105 | 4,229 | 11.7 | 7,979 | 22.1 | 53.0 |
| 1963 | 35,738 | 4,356 | 12.2 | 7,563 | 21.2 | 57.6 |
| 1964 | 28,636 | 3,720 | 13.0 | 6,888 | 24,1 | 54.0 |
| 1965 | 29,588 | 4,370 | 14.8 | 7,331 | 24.8 | 59.6 |
| 1966 | 29,933 | 4,788 | 16.0 | 7,082 | 23.7 | 67.6 |
| 1967 | 20,841 | 2,527 | 12.1 | 4,011 | 19.2 | 63.0 |
| 1968 | 25,734 | 3,276 | 12.7 | 7,255 | 28.2 | 45.2 |
| 1969 | 21,388 | 3,354 | 15.7 | 6,700 | 31.3 | 50.1 |
| 1970 | 16,267 | 2,151 | 13.2 | 4,300[a] | 26.4 | 40.0 |
| 1971 | 14,909 | 2,258 | 15.1 | 4,199 | 28.2 | 53.8 |

[a]Estimated

TABLE 1--Continued

PROVINCE: SASKATCHEWAN

| Year | Landings | Landed Value | Landed Value Per Pound | Export Value | Export Value Per Pound | Landed Value As Percent of Export Value |
|---|---|---|---|---|---|---|
| 1956 | 9,441 | 784 | 8.3 | 1,766 | 18.7 | 44.4 |
| 1957 | 11,065 | 939 | 8.5 | 2,010 | 18.2 | 46.7 |
| 1958 | 12,600 | 1,091 | 8.7 | 2,339 | 18.6 | 46.6 |
| 1959 | 12,550 | 1,190 | 9.5 | 2,596 | 20.7 | 45.8 |
| 1960 | 14,530 | 1,367 | 9.4 | 2,830 | 19.5 | 48.3 |
| 1961 | 14,515 | 1,385 | 9.5 | 3,166 | 21.8 | 43.7 |
| 1962 | 14,999 | 1,478 | 9.9 | 3,115 | 20.8 | 47.4 |
| 1963 | 14,089 | 1,300 | 9.2 | 2,711 | 19.2 | 48.0 |
| 1964 | 14,306 | 1,490 | 10.4 | 3,082 | 21.5 | 48.0 |
| 1965 | 14,933 | 1,734 | 11.6 | 3,322 | 22.2 | 52.2 |
| 1966 | 13,786 | 1,706 | 12.4 | 3,413 | 24.8 | 50.0 |
| 1967 | 11,725 | 1,163 | 9.9 | 2,317 | 19.8 | 50.2 |
| 1968 | 10,970 | 1,382 | 12.6 | 2,769 | 25.2 | 49.9 |
| 1969 | 13,915 | 2,294 | 16.5 | 4,587 | 33.0 | 50.0 |
| 1970 | 12,213 | 2,083 | 17.1 | 4,165 | 34.1 | 50.0 |
| 1971 | 11,705 | 1,839 | 15.7 | 4,423 | 37.8 | 41.6 |

TABLE 1--Continued

PROVINCE: ALBERTA

| Year | Landings | Landed Value | Landed Value Per Pound | Export Value | Export Value Per Pound | Landed Value As Percent of Export Value |
|---|---|---|---|---|---|---|
| 1956 | 9,641 | 790 | 8.2 | 1,306 | 13.5 | 60.5 |
| 1957 | 10,415 | 854 | 8.2 | 1,451 | 13.9 | 58.9 |
| 1958 | 11,482 | 879 | 7.7 | 1,450 | 12.6 | 60.6 |
| 1959 | 12,664 | 1,016 | 8.0 | 1,684 | 13.3 | 60.3 |
| 1960 | 15,852 | 1,159 | 7.3 | 2,021 | 12.7 | 57.3 |
| 1961 | 11,317 | 883 | 7.8 | 1,701 | 15.0 | 51.9 |
| 1962 | 9,025 | 714 | 7.9 | 1,234 | 13.7 | 57.9 |
| 1963 | 8,509 | 676 | 7.9 | 1,125 | 13.2 | 60.1 |
| 1964 | 12,751 | 789 | 6.3 | 1,222 | 9.6 | 65.4 |
| 1965 | 8,514 | 677 | 8.0 | 1,128 | 13.2 | 60.0 |
| 1966 | 10,907 | 844 | 7.7 | 1,383 | 12.7 | 61.0 |
| 1967 | 9,914 | 758 | 7.6 | 1,398 | 14.1 | 54.2 |
| 1968 | 11,883 | 917 | 7.7 | 1,462 | 12.3 | 62.7 |
| 1969 | 10,991 | 935 | 8.5 | 1,563 | 14.2 | 59.8 |
| 1970 | 6,896[a] | 826[a] | 12.0 | 1,588[a] | 23.0 | 52.0 |
| 1971 | 2,713 | 413 | 15.2 | 747 | 27.5 | 55.3 |

[a]Fiscal year basis

TABLE 1--Continued

PROVINCE: NORTHWEST TERRITORIES

| Year | Landings | Landed Value | Landed Value Per Pound | Export Value | Export Value Per Pound | Landed Value As Percent of Export Value |
|---|---|---|---|---|---|---|
| 1956 | 6,939 | 788 | 11.4 | 1,483 | 21.4 | 53.1 |
| 1957 | 6,584 | 721 | 11.0 | 1,299 | 19.7 | 55.5 |
| 1958 | 5,894 | 682 | 11.6 | 1,235 | 21.0 | 55.2 |
| 1959 | 5,747 | 703 | 12.2 | 1,146 | 20.0 | 61.3 |
| 1960 | 5,613 | 700 | 12.5 | 1,075 | 19.2 | 65.1 |
| 1961 | 5,676 | 675 | 11.9 | 1,178 | 20.8 | 57.3 |
| 1962 | 6,544 | 860 | 13.1 | 1,231 | 18.8 | 69.8 |
| 1963 | 6,347 | 796 | 12.5 | 1,330 | 21.0 | 59.8 |
| 1964 | 6,890 | 833 | 12.1 | 1,250 | 18.1 | 66.6 |
| 1965 | 6,297 | 994 | 15.8 | 1,437 | 22.8 | 69.9 |
| 1966 | 4,362 | 792 | 18.2 | 1,259 | 29.8 | 62.9 |
| 1967 | 4,342 | 842 | 19.4 | 1,295 | 29.8 | 65.0 |
| 1968 | 4,296 | 781 | 18.2 | 923 | 21.5 | 84.6 |
| 1969 | 4,658 | 1,035 | 22.2 | 1,200[a] | 25.8 | 86.3 |
| 1970 | 4,608 | 1,117 | 24.2 | 1,296 | 28.1 | 86.2 |
| 1971 | 4,449 | 1,083 | 24.3 | 1,332 | 29.9 | 81.3 |

[a]Estimated

TABLE 1--Continued

TOTAL ALL PROVINCES

| Year | Landings | Landed Value | Landed Value Per Pound | Export Value | Export Value Per Pound | Landed Value As Percent of Export Value |
|---|---|---|---|---|---|---|
| 1956 | 116,128 | 13,236 | 11.4 | 19,900 | 17.1 | 66.5 |
| 1957 | 110,744 | 12,839 | 11.6 | 18,617 | 16.8 | 69.0 |
| 1958 | 109,080 | 13,463 | 12.3 | 20,048 | 18.4 | 67.2 |
| 1959 | 110,997 | 11,532 | 10.4 | 17,590 | 15.8 | 65.6 |
| 1960 | 115,539 | 12,076 | 10.5 | 18,567 | 16.1 | 65.0 |
| 1961 | 117,117 | 11,862 | 10.1 | 18,923 | 16.2 | 62.7 |
| 1962 | 130,453 | 12,622 | 9.7 | 19,568 | 15.0 | 64.5 |
| 1963 | 119,025 | 12,626 | 10.6 | 18,921 | 15.9 | 66.7 |
| 1964 | 106,091 | 12,064 | 11.4 | 18,317 | 17.3 | 65.9 |
| 1965 | 111,800 | 14,177 | 12.7 | 20,420 | 18.3 | 69.4 |
| 1966 | 115,332 | 14,125 | 12.2 | 19,881 | 17.2 | 71.0 |
| 1967 | 101,478 | 11,278 | 11.1 | 15,723 | 15.5 | 71.7 |
| 1968 | 108,590 | 12,324 | 11.3 | 19,126 | 17.6 | 64.4 |
| 1969 | 114,157 | 15,007 | 13.1 | 22,363 | 19.6 | 67.2 |
| 1970 | 86,065 | 12,717 | 14.8 | 18,701 | 21.7 | 68.0 |
| 1971 | 73,629 | 11,944 | 16.2 | 17,846 | 24.2 | 66.9 |

Source: Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Vol. 4, 1972.

TABLE 2

FRESHWATER FISH LANDINGS AND LANDED VALUES OF PRINCIPAL SPECIES: 1956-1971[a]

| Year | Landed | Landed Value | Landed Value Per Pound | Year | Landed | Landed Value | Landed Value Per Pound |
|---|---|---|---|---|---|---|---|
| | Pike | | | | Pickerel | | |
| 1956 | 6,987 | 306 | 4.4 | 1956 | 20,922 | 3,131 | 15.1 |
| 1957 | 7,598 | 322 | 4.2 | 1957 | 19,215 | 3,603 | 18.1 |
| 1958 | 7,231 | 353 | 4.9 | 1958 | 15,475 | 3,387 | 21.9 |
| 1959 | 7,799 | 424 | 5.4 | 1959 | 12,996 | 2,994 | 23.0 |
| 1960 | 8,029 | 460 | 5.7 | 1960 | 13,888 | 3,017 | 21.7 |
| 1961 | 7,864 | 409 | 5.2 | 1961 | 13,346 | 2,455 | 18.4 |
| 1962 | 9,065 | 480 | 5.1 | 1962 | 14,959 | 3,226 | 21.6 |
| 1963 | 8,357 | 409 | 4.9 | 1963 | 16,115 | 3,715 | 23.1 |
| 1964 | 8,073 | 397 | 4.9 | 1964 | 11,652 | 2,916 | 25.0 |
| 1965 | 7,726 | 439 | 5.7 | 1965 | 9,717 | 3,143 | 32.3 |
| 1966 | 7,866 | 487 | 6.2 | 1966 | 11,189 | 3,995 | 35.7 |
| 1967 | 7,782 | 496 | 6.4 | 1967 | 8,639 | 2,123 | 24.6 |
| 1968 | 9,514 | 673 | 7.1 | 1968 | 8,534 | 2,451 | 28.7 |
| 1969 | 8,248 | 634 | 7.7 | 1969 | 7,681 | 2,823 | 36.8 |
| 1970 | 6,940 | 544 | 7.8 | 1970 | 6,779 | 2,568 | 37.9 |
| 1971 | 6,611 | 467 | 7.1 | 1971 | 6,167 | 2,061 | 33.4 |
| | Sauger | | | | Trout | | |
| 1956 | 4,428 | 625 | 14.1 | 1956 | 5,096 | 758 | 14.9 |
| 1957 | 5,368 | 803 | 15.0 | 1957 | 4,607 | 627 | 13.6 |
| 1958 | 5,473 | 1,109 | 20.3 | 1958 | 4,966 | 675 | 13.6 |
| 1959 | 4,003 | 942 | 23.5 | 1959 | 4,533 | 627 | 13.8 |
| 1960 | 4,741 | 1,048 | 22.1 | 1960 | 3,922 | 537 | 13.7 |
| 1961 | 3,300 | 566 | 17.2 | 1961 | 3,891 | 537 | 13.8 |
| 1962 | 3,797 | 791 | 20.8 | 1962 | 4,066 | 599 | 14.7 |
| 1963 | 5,406 | 1,172 | 21.7 | 1963 | 3,517 | 478 | 13.6 |
| 1964 | 4,442 | 917 | 20.6 | 1964 | 3,384 | 464 | 13.7 |
| 1965 | 4,109 | 1,303 | 31.7 | 1965 | 3,176 | 553 | 17.4 |
| 1966 | 4,833 | 1,461 | 30.2 | 1966 | 2,948 | 539 | 18.3 |
| 1967 | 2,834 | 441 | 15.6 | 1967 | 2,941 | 530 | 18.0 |
| 1968 | 4,053 | 678 | 16.7 | 1968 | 2,390 | 481 | 20.1 |
| 1969 | 2,578 | 725 | 28.1 | 1969 | 2,274 | 573 | 25.2 |
| 1970 | 739 | 250 | 33.8 | 1970 | 2,094 | 481 | 23.0 |
| 1971 | 656 | 225 | 34.3 | 1971 | 1,841 | 384 | 20.9 |

[a]Quantities in thousand pounds, common landed form, values in thousand dollars, per pound figures in cents.

TABLE 2--Continued

| Year | Landed | Landed Value | Landed Value Per Pound | Year | Landed | Landed Value | Landed Value Per Pound |
|---|---|---|---|---|---|---|---|
| | Whitefish | | | | Totals | | |
| 1956 | 22,884 | 3,636 | 15.9 | 1956 | 60,277 | 8,486 | 14.1 |
| 1957 | 24,444 | 3,611 | 14.8 | 1957 | 61,232 | 8,966 | 14.6 |
| 1958 | 24,023 | 3,496 | 14.6 | 1958 | 57,168 | 9,020 | 15.8 |
| 1959 | 24,796 | 3,548 | 14.3 | 1959 | 54,127 | 8,535 | 15.8 |
| 1960 | 27,093 | 3,497 | 12.9 | 1960 | 57,673 | 8,559 | 14.8 |
| 1961 | 27,184 | 3,814 | 14.0 | 1961 | 55,585 | 7,781 | 14.0 |
| 1962 | 26,578 | 3,817 | 14.4 | 1962 | 58,145 | 8,913 | 15.3 |
| 1963 | 25,279 | 3,387 | 13.4 | 1963 | 58,674 | 9,161 | 15.6 |
| 1964 | 22,954 | 3,459 | 15.1 | 1964 | 50,505 | 8,153 | 16.1 |
| 1965 | 24,236 | 3,896 | 16.1 | 1965 | 48,964 | 9,334 | 19.1 |
| 1966 | 20,510 | 3,506 | 17.1 | 1966 | 47,346 | 9,988 | 21.1 |
| 1967 | 18,526 | 3,279 | 17.7 | 1967 | 40,722 | 6,869 | 16.9 |
| 1968 | 18,300 | 3,757 | 20.5 | 1968 | 42,791 | 8,040 | 18.8 |
| 1969 | 20,544 | 4,566 | 22.2 | 1969 | 41,325 | 9,321 | 22.6 |
| 1970 | 19,250 | 3,903 | 20.3 | 1970 | 35,802 | 7,746 | 21.6 |
| 1971 | 17,432 | 3,498 | 20.0 | 1971 | 32,707 | 6,635 | 20.3 |

Source: Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Vol. 4, 1972.

## TABLE 3

### Exports of Principal Species: 1968-1971

Quantities (Q.) in thousand pounds, product weight
Values (V.) in thousand dollars.

| | 1968 | | 1969 | | 1970 | | 1971 | |
|---|---|---|---|---|---|---|---|---|
| | Q. | V. | Q. | V. | Q. | V. | Q. | V. |
| Pickerel | 8,252 | 4,911 | 6,755 | 4,831 | 5,267 | 4,417 | 4,945 | 4,373 |
| Whole or Dressed | 4,490 | 2,198 | 4,204 | 2,497 | 3,654 | 2,500 | 3,410 | 2,470 |
| Fresh | 4,029 | 1,994 | 3,780 | 2,256 | 3,145 | 2,157 | 2,873 | 2,088 |
| United States | 4,029 | 1,994 | 3,780 | 2,256 | 3,145 | 2,157 | 2,873 | 2,088 |
| Frozen | 461 | 204 | 424 | 241 | 509 | 343 | 537 | 382 |
| United States | 461 | 204 | 424 | 241 | 509 | 343 | 537 | 382 |
| Fillets | 3,762 | 2,713 | 2,551 | 2,334 | 1,613 | 1,917 | 1,535 | 1,903 |
| Fresh | 288 | 206 | 179 | 161 | 183 | 186 | 373 | 368 |
| United States | 288 | 206 | 179 | 160 | 183 | 186 | 373 | 368 |
| Frozen | 3,474 | 2,507 | 2,372 | 2,173 | 1,430 | 1,731 | 1,162 | 1,535 |
| United States | 3,436 | 2,491 | 2,372 | 2,173 | 1,430 | 1,731 | 1,162 | 1,535 |
| Pike | 2,290 | 866 | 1,766 | 649 | 4,484 | 1,745 | 2,844 | 1,225 |
| Whole or Dressed | 808 | 185 | 652 | 156 | 1,735 | 532 | 1,172 | 430 |
| Fresh | 808 | 185 | 652 | 156 | 477 | 142 | 423 | 140 |
| United States | 808 | 185 | 639 | 152 | 475 | 136 | 386 | 125 |
| Frozen [1] | --- | --- | --- | --- | 1,258 | 390 | 749 | 290 |
| France | --- | --- | --- | --- | 934 | 280 | 502 | 198 |
| Fillets | 1,482 | 681 | 1,109 | 491 | 1,350 | 689 | 921 | 486 |
| Frozen | 1,482 | 681 | 1,109 | 491 | 1,350 | 689 | 921 | 486 |
| France | 289 | 129 | 302 | 129 | 355 | 131 | 322 | 148 |
| United States | 1,193 | 552 | 802 | 360 | 995 | 558 | 599 | 338 |
| Other Countries | --- | --- | 5 | 2 | --- | --- | --- | --- |
| Blocks | --- | --- | --- | --- | 1,399 | 524 | 751 | 309 |
| Frozen [3] | --- | --- | --- | --- | 1,399 | 524 | 751 | 309 |
| United States | --- | --- | --- | --- | 1,324 | 495 | 735 | 301 |

TABLE 3

[Continued]

| | 1968 | | 1969 | | 1970 | | 1971 | |
|---|---|---|---|---|---|---|---|---|
| | Q. | V. | Q. | V. | Q. | V. | Q. | V. |
| Sauger | 1,198 | 363 | 1,094 | 495 | 471 | 277 | 523 | 324 |
| Whole or Dressed | 1,198 | 363 | 1,094 | 495 | 432 | 236 | 506 | 311 |
| Fresh | 1,198 | 363 | 1,094 | 495 | 343 | 192 | 363 | 221 |
| United States | 1,198 | 363 | 1,094 | 495 | 343 | 192 | 363 | 221 |
| Frozen [1] | --- | --- | --- | --- | 89 | 44 | 143 | 90 |
| Fillets | --- | --- | --- | --- | 39 | 41 | 17 | 13 |
| Frozen [2] | --- | --- | --- | --- | 39 | 41 | 17 | 13 |
| Trout | 1,295 | 609 | 959 | 545 | 1,251 | 760 | 906 | 560 |
| Whole or Dressed | 1,115 | 518 | 832 | 476 | 1,007 | 581 | 616 | 345 |
| Fresh | 1,115 | 518 | 832 | 476 | 619 | 370 | 352 | 202 |
| United States | 1,115 | 518 | 832 | 476 | 618 | 370 | 352 | 202 |
| Frozen [1] | --- | --- | --- | --- | 389 | 211 | 264 | 143 |
| United States | --- | --- | --- | --- | 384 | 208 | 263 | 143 |
| Fillets | 180 | 91 | 127 | 69 | 244 | 179 | 290 | 215 |
| Frozen | 180 | 91 | 127 | 69 | 244 | 179 | 290 | 215 |
| United States | 180 | 91 | 127 | 69 | 244 | 179 | 290 | 215 |
| Whitefish | 11,886 | 5,538 | 10,744 | 5,642 | 11,429 | 6,174 | 10,712 | 5,742 |
| Whole or Dressed | 11,528 | 5,360 | 10,001 | 5,221 | 9,229 | 5,110 | 8,585 | 4,620 |
| Fresh | 8,445 | 3,915 | 7,077 | 3,767 | 6,251 | 3,545 | 5,369 | 2,939 |
| United States | 8,445 | 3,915 | 7,077 | 3,767 | 6,251 | 3,545 | 5,232 | 2,888 |
| Frozen | 3,085 | 1,445 | 2,924 | 1,454 | 2,978 | 1,565 | 3,216 | 1,681 |
| Finland | 147 | 46 | 497 | 149 | 330 | 110 | 576 | 221 |
| United States | 2,900 | 1,392 | 2,420 | 1,303 | 2,562 | 1,430 | 2,739 | 1,459 |
| Other Countries | 36 | 7 | 7 | 2 | 86 | 25 | 1 | 1 |
| Fillets | 358 | 178 | 743 | 421 | 970 | 617 | 845 | 574 |
| Frozen | 358 | 178 | 743 | 421 | 970 | 617 | 845 | 574 |
| United States | 358 | 178 | 743 | 421 | 970 | 617 | 845 | 574 |
| Blocks | --- | --- | --- | --- | 1,230 | 447 | 1,282 | 548 |
| Frozen [3] | --- | --- | --- | --- | 1,230 | 447 | 1,282 | 548 |
| United States | --- | --- | --- | --- | 1,212 | 442 | 1,282 | 548 |

TABLE 3

[Continued]

| | 1968 | | 1969 | | 1970 | | 1971 | |
|---|---|---|---|---|---|---|---|---|
| | Q. | V. | Q. | V. | Q. | V. | Q. | V. |
| Freshwater Fish | 7,438 | 2,339 | 7,108 | 2,360 | 1,148 | 409 | 812 | 276 |
| Whole or Dressed | 2,527 | 790 | 2,527 | 802 | 907 | 330 | 442 | 175 |
| Frozen, n.e.s. | 2,521 | 790 | 2,527 | 802 | 907 | 330 | 442 | 175 |
| France | 516 | 155 | 538 | 162 | 9 | 4 | 29 | 9 |
| United States | 1,986 | 623 | 1,856 | 607 | 779 | 295 | 315 | 139 |
| Other Countries | 25 | 12 | 133 | 33 | 119 | 31 | 98 | 27 |
| Fillets | 504 | 311 | 308 | 229 | 211 | 70 | 228 | 67 |
| Frozen,n.e.s. | 504 | 311 | 308 | 229 | 211 | 70 | 228 | 67 |
| United States | 504 | 311 | 303 | 226 | 210 | 70 | 227 | 67 |
| Blocks | 4,407 | 1,238 | 4,273 | 1,329 | 30 | 9 | 142 | 34 |
| Frozen, n.e.s. | 4,407 | 1,238 | 4,273 | 1,329 | 30 | 9 | 142 | 34 |
| United States | 4,342 | 1,211 | 4,228 | 1,316 | 30 | 9 | 142 | 34 |
| Total Exports of Principal Species: | 32,359 | 14,626 | 28,426 | 14,522 | 24,050 | 13,782 | 20,742 | 12,500 |
| To United States | 31,243 | 14,234 | 26,876 | 14,022 | 21,664 | 12,963 | 18,615 | 11,627 |
| To other countries | 1,013 | 349 | 1,482 | 477 | 1,833 | 581 | 1,528 | 604 |

[1] New class in 1970. Included with "Freshwater Fish, whole or dressed, frozen n.e.s." prior to 1970.

[2] New class in 1970. Included with "Freshwater Fish, filleted, frozen, n.e.s." prior to 1970.

[3] New class in 1970. Included with "Freshwater Fish Blocks, frozen, n.e.s." prior to 1970.

SOURCE: Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Vol. 4, 1972.

TABLE 4

INDEX OF PRICES RECEIVED BY FISHERMEN,
BY SPECIE, 1956-1971

1935-1939 = 100

| Year | Wholesale Price Index | Pike | | Pickerel | |
|---|---|---|---|---|---|
| | | Landed Value Per Pound | Deflated Landed Value Per Pound | Landed Value Per Pound | Deflated Landed Value Per Pound |
| 1956 | 225.6 | 4.4 | 1.95 | 15.1 | 6.69 |
| 1957 | 227.4 | 4.2 | 1.84 | 18.1 | 7.96 |
| 1958 | 227.8 | 4.9 | 2.15 | 21.9 | 9.61 |
| 1959 | 230.6 | 5.4 | 2.34 | 23.0 | 9.97 |
| 1960 | 230.9 | 5.7 | 2.47 | 21.7 | 9.40 |
| 1961 | 233.3 | 5.2 | 2.23 | 18.4 | 7.89 |
| 1962 | 240.0 | 5.1 | 2.13 | 21.6 | 9.00 |
| 1963 | 244.6 | 4.9 | 2.00 | 23.1 | 9.44 |
| 1964 | 245.4 | 4.9 | 2.00 | 25.0 | 10.19 |
| 1965 | 250.4 | 5.7 | 2.28 | 32.3 | 12.90 |
| 1966 | 259.5 | 6.2 | 2.39 | 35.7 | 13.76 |
| 1967 | 264.1 | 6.4 | 2.42 | 24.6 | 9.31 |
| 1968 | 269.9 | 7.1 | 2.63 | 28.7 | 10.63 |
| 1969 | 282.4 | 7.7 | 2.73 | 36.8 | 13.03 |
| 1970 | 286.4 | 7.8 | 2.72 | 37.9 | 13.23 |
| 1971 | 289.9 | 7.1 | 2.45 | 33.4 | 11.52 |

TABLE 4--Continued

| Year | Wholesale Price Index | Sauger | | Trout | |
|---|---|---|---|---|---|
| | | Landed Value Per Pound | Deflated Landed Value Per Pound | Landed Value Per Pound | Deflated Landed Value Per Pound |
| 1956 | 225.6 | 14.1 | 6.25 | 14.9 | 6.32 |
| 1957 | 227.4 | 15.0 | 6.60 | 13.6 | 5.98 |
| 1958 | 227.8 | 20.3 | 8.91 | 13.6 | 5.97 |
| 1959 | 230.6 | 23.5 | 10.19 | 13.8 | 5.98 |
| 1960 | 230.9 | 22.1 | 9.57 | 13.7 | 5.93 |
| 1961 | 233.3 | 17.2 | 7.37 | 13.8 | 5.92 |
| 1962 | 250.0 | 20.8 | 8.67 | 14.7 | 6.13 |
| 1963 | 244.6 | 21.7 | 8.87 | 13.6 | 5.56 |
| 1964 | 245.4 | 20.6 | 8.39 | 13.7 | 5.58 |
| 1965 | 250.4 | 31.7 | 12.66 | 17.4 | 6.95 |
| 1966 | 259.5 | 30.2 | 11.64 | 18.3 | 7.05 |
| 1967 | 264.1 | 15.6 | 5.91 | 18.0 | 6.82 |
| 1968 | 269.9 | 16.7 | 6.19 | 20.1 | 7.48 |
| 1969 | 282.4 | 28.1 | 9.95 | 25.2 | 8.92 |
| 1970 | 286.4 | 33.8 | 11.80 | 23.0 | 8.03 |
| 1971 | 289.9 | 34.3 | 11.83 | 20.9 | 7.21 |

TABLE 4--Continued

| Year | Wholesale Price Index | Whitefish | | Total | |
|---|---|---|---|---|---|
| | | Landed Value Per Pound | Deflated Landed Value Per Pound | Landed Value Per Pound | Deflated Landed Value Per Pound |
| 1956 | 225.6 | 15.6 | 7.05 | 14.1 | 6.25 |
| 1957 | 227.4 | 14.8 | 6.51 | 14.6 | 6.42 |
| 1958 | 227.8 | 14.6 | 6.41 | 15.8 | 6.94 |
| 1959 | 230.6 | 14.3 | 6.20 | 15.8 | 6.85 |
| 1960 | 230.9 | 12.9 | 5.59 | 14.8 | 6.41 |
| 1961 | 233.3 | 14.0 | 6.00 | 14.0 | 6.00 |
| 1962 | 240.0 | 14.4 | 6.00 | 15.3 | 6.38 |
| 1963 | 244.6 | 13.4 | 5.48 | 15.6 | 6.38 |
| 1964 | 245.4 | 15.1 | 6.15 | 16.1 | 6.56 |
| 1965 | 250.4 | 16.1 | 6.43 | 19.1 | 7.63 |
| 1966 | 259.5 | 17.1 | 6.59 | 21.1 | 8.13 |
| 1967 | 264.1 | 17.7 | 6.70 | 16.9 | 6.40 |
| 1968 | 269.9 | 20.5 | 7.60 | 18.8 | 6.97 |
| 1969 | 282.4 | 22.2 | 7.86 | 22.6 | 8.00 |
| 1970 | 286.4 | 20.3 | 7.09 | 21.6 | 7.54 |
| 1971 | 289.9 | 20.0 | 6.90 | 20.3 | 7.00 |

**Source:** Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Vol. 4, 1972; Dominion Bureau of Statistics, Canada Yearbook 1972, Ottawa, Ontario: Statistics Canada, 1972, p. 1045.

TABLE 5

INDEX OF PRICES RECEIVED BY FISHERMEN,
BY PROVINCE, 1956-1971

1935-1939 = 100

| Year | Wholesale Price Index | Ontario | | Manitoba | |
|---|---|---|---|---|---|
| | | Landed Value Per Pound | Deflated Landed Value Per Pound | Landed Value Per Pound | Deflated Landed Value Per Pound |
| 1956 | 225.6 | 13.3 | 5.9 | 9.7 | 4.3 |
| 1957 | 227.4 | 13.8 | 6.1 | 10.4 | 4.6 |
| 1958 | 227.8 | 15.4 | 6.8 | 11.1 | 4.9 |
| 1959 | 230.6 | 9.9 | 4.3 | 12.1 | 5.2 |
| 1960 | 230.9 | 10.5 | 4.5 | 12.1 | 5.2 |
| 1961 | 233.3 | 10.5 | 4.5 | 10.4 | 4.5 |
| 1962 | 240.0 | 8.4 | 3.5 | 11.7 | 4.9 |
| 1963 | 244.6 | 10.1 | 4.1 | 12.2 | 5.0 |
| 1964 | 245.4 | 12.0 | 4.9 | 13.0 | 5.3 |
| 1965 | 250.4 | 12.2 | 4.9 | 14.8 | 5.9 |
| 1966 | 259.5 | 10.6 | 4.1 | 16.0 | 6.2 |
| 1967 | 264.1 | 11.0 | 4.2 | 12.1 | 4.6 |
| 1968 | 269.9 | 10.7 | 4.0 | 12.7 | 4.7 |
| 1969 | 282.4 | 11.7 | 4.1 | 15.7 | 5.6 |
| 1970 | 286.4 | 14.2 | 5.0 | 13.2 | 4.6 |
| 1971 | 289.9 | 15.9 | 5.5 | 15.1 | 5.2 |

TABLE 5--Continued

| Year | Wholesale Price Index | Saskatchewan | | Alberta | |
|---|---|---|---|---|---|
| | | Landed Value Per Pound | Deflated Landed Value Per Pound | Landed Value Per Pound | Deflated Landed Value Per Pound |
| 1956 | 225.6 | 8.3 | 3.7 | 8.2 | 3.6 |
| 1957 | 227.4 | 8.5 | 3.7 | 8.2 | 3.6 |
| 1958 | 227.8 | 8.7 | 3.8 | 7.7 | 3.4 |
| 1959 | 230.6 | 9.5 | 4.1 | 8.0 | 3.5 |
| 1960 | 230.9 | 9.4 | 4.0 | 7.3 | 3.2 |
| 1961 | 233.3 | 9.5 | 4.1 | 7.8 | 3.3 |
| 1962 | 240.0 | 9.9 | 4.1 | 7.9 | 3.3 |
| 1963 | 244.6 | 9.2 | 3.8 | 7.9 | 3.2 |
| 1964 | 245.4 | 10.4 | 4.2 | 6.3 | 2.6 |
| 1965 | 250.4 | 11.6 | 4.7 | 8.0 | 3.2 |
| 1966 | 259.5 | 12.4 | 4.8 | 7.7 | 3.0 |
| 1967 | 264.1 | 9.9 | 3.8 | 7.6 | 2.9 |
| 1968 | 269.9 | 12.6 | 4.7 | 7.7 | 2.9 |
| 1969 | 282.4 | 16.5 | 5.8 | 8.5 | 3.0 |
| 1970 | 286.4 | 17.1 | 6.0 | 12.0 | 4.2 |
| 1971 | 289.9 | 15.7 | 5.4 | 15.2 | 5.2 |

TABLE 5--Continued

| Year | Wholesale Price Index | Northwest Territory | | Total | |
|---|---|---|---|---|---|
| | | Landed Value Per Pound | Deflated Landed Value Per Pound | Landed Value Per Pound | Deflated Landed Value Per Pound |
| 1956 | 225.6 | 11.4 | 5.1 | 11.4 | 5.1 |
| 1957 | 227.4 | 11.0 | 4.8 | 11.6 | 5.1 |
| 1958 | 227.8 | 11.6 | 5.1 | 12.3 | 5.4 |
| 1959 | 230.6 | 12.2 | 5.3 | 10.4 | 4.5 |
| 1960 | 230.9 | 12.5 | 5.4 | 10.5 | 4.5 |
| 1961 | 233.3 | 11.9 | 5.1 | 10.1 | 4.3 |
| 1962 | 240.0 | 13.1 | 5.5 | 9.7 | 4.0 |
| 1963 | 244.6 | 12.5 | 5.1 | 10.6 | 4.3 |
| 1964 | 245.4 | 12.1 | 4.9 | 11.4 | 4.6 |
| 1965 | 250.4 | 15.8 | 6.3 | 12.7 | 5.1 |
| 1966 | 259.5 | 18.2 | 7.0 | 12.2 | 4.7 |
| 1967 | 264.1 | 19.4 | 7.3 | 11.1 | 4.2 |
| 1968 | 269.9 | 18.2 | 6.7 | 11.3 | 4.2 |
| 1969 | 282.4 | 22.2 | 7.9 | 13.1 | 4.6 |
| 1970 | 286.4 | 24.2 | 8.4 | 14.8 | 5.2 |
| 1971 | 289.9 | 24.3 | 8.4 | 16.2 | 5.6 |

Source: Canada, Department of the Environment, Intelligence Services Division, Marketing Services Branch, Fisheries Service, Annual Statistical Review of Canadian Fisheries, Vol. 4, 1972.

# APPENDIX B

## SUMMARY OF FINDINGS AND RECOMMENDATIONS OF COMMISSION OF INQUIRY INTO FRESHWATER FISH MARKETING

# SUMMARY OF FINDINGS AND RECOMMENDATIONS

## FINDINGS:

We find that:

1 - prices for round or dressed fish in export markets are weak because there are too many exporters to counter the control exercised by a few importers;

2 - in marketing round or dressed fish Canadian exporters receive too small a share of the price paid by the consumer, because, due to their relative weakness as sellers, they bear the cost of uncertainties and risks encountered in exporting;

3 - the uncertainties and risks are especially extensive in exporting round or dressed freshwater fish due to (1) the perishable nature of the product (2) the absence of effective quality control and of product standardization and (3) the lack of coordination between the demand and supply coming to the market;

4 - pickerel, pike, sauger, whitefish and lake trout, are the major species which are, in total, marketed mostly round or dressed; and that ninety percent of the total catch of these species are produced in the inland fishery of Manitoba, Saskatchewan, Alberta, the Northwest Territories and Northern Ontario;

5 - prices to the fisherman in Manitoba, Saskatchewan, Alberta, the Northwest Territories and Northern Ontario are weak, and the share received by the fisherman of the price paid by the consumer is far too low;

6 - the fisherman receives an unduly small share of the retail price because (1) the exporter passes on the reduction in export return to him which result from his ineffectiveness in bargaining with the importer and (2) because domestic handling and processing of freshwater fish is inefficient and costly;

7 - we agree in many respects with the proposals which have been before the Federal-Provincial Prairie Fisheries Committee concerning the desirability of an export monopoly. However, we disagree strongly with their proposals, that fish be bought from licensed fish dealers and not directly from fishermen, and as well that they make no provision for a direct transfer to the fisherman of any increased export earnings.

RECOMMENDATIONS:

We recommend that:

1 - a Freshwater Fish Marketing Board be established under federal legislation;

2 - the Board consist of not less than five and not more than seven members, one of whom shall be chairman and general manager, all to be appointed by the Federal Government;

3 - the Board be the sole seller of the freshwater fish and fish products produced in the designated area consisting of Northwestern Ontario, Manitoba, Saskatchewan, Alberta and the Northwest Territories;

4 - the Board accept delivery of freshwater fish only from the fisherman;

5 - the Board prior to the opening of each fishing season establish initial prices for the duration of the season for each species of fish, by grade, "in-store" Winnipeg, and at such other exporting points as the Board may decide;

6 - the Board pool the returns from the sale of its fish and fish products and pool the costs incurred in marketing these products;

7 - the Board determine and make a final payment to the fisherman for the fish delivered to the Board, after all fish delivered has been sold;

8 - the Board undertake the handling, packing, processing, and storing of the fish;

9 - the Board sell and dispose of the fish for such prices as it may consider satisfactory, keeping in mind the overall purpose of promoting the sale of Canadian freshwater fish in world markets;

10 - the Board have the authority to finance the fisherman with working capital;

11 - standards and grades for fish and fish products be established to promote orderly marketing, to guarantee a supply of prime quality fish, and to enhance consumer confidence in Canadian freshwater fish;

12 - financial assistance be given to the secondary fishing industry to modernize cold storage facilities and processing facilities;

13 - the Canadian Government make a formal approach to the Government of the United States to agree on a method of inspection of whitefish, which is mutually more satisfactory;

14 - a cooperative educational effort by all governments concerned to acquaint the fisherman with the operations of the Board;

15 - that present legislation governing water pollution be strictly enforced and that governments take all further steps required to prevent pollution of Canadian inland waters.

16 - research pertaining to freshwater fish and freshwater fish products be continued and expanded where desirable.

17 - that the opening and closing of fishing seasons on lakes be determined collectively by the governments concerned in order to facilitate the coordination of supply and demand.

SOURCE: George H. McIvor, Report of Commission of Inquiry Into Freshwater Fish Marketing, Ottawa, Ontario: The Queen's Printer, 1965.

# APPENDIX C

## OUTLINE FOR INTERVIEWS WITH FRESHWATER FISH MARKETING CORPORATION EMPLOYEES

# OUTLINE FOR INTERVIEWS WITH FRESHWATER FISH MARKETING CORPORATION EMPLOYEES

I. Delivery Points

- A. Current number
- B. Locations
- C. Approximate number of fishermen served by each
- D. Area each services
- E. Pounds delivered to each annually
- F. Functions performed by delivery point (grading, dressing, filleting, cooking, freezing, packaging, etc.)
- G. Transportation to processing plant.
  1. How (truck, rail, air)
  2. How often
  3. By whom (corporate or public/private owner)
- H. Does storage take place at delivery point
  1. If so, how long
  2. In what facilities
- I. Who owns delivery points - who operates
- J. What services do delivery points perform for fishermen - credit, financing, information, etc.

II. Processing Plants

- A. Current number
- B. Locations
- C. Delivery points served by each

D. Number of pounds handled by each annually

E. Functions performed by processing plants (see I. F. above)

F. Storage - how long, what facilities

G. Who owns processing plants

H. Payment to delivery points

1. Terms

2. By whom

3. When

I. Services performed - credit, financing, information, etc.

Physical flow from processing plants to other corporate facilities and/or to wholesalers

A. Within corporation

1. To where

2. Physical flows further to wholesalers

B. To wholesalers

1. Where

2. Terms of sales

3. How is price established

The Corporation

A. Services performed for fishermen, delivery points and processing plants

1. Risk

2. Financing

3. Communication information

4. Collecting, sorting, dispersing

B. Contractual relationship with delivery points, processing plants, and wholesalers

C. How are wholesalers selected

D. Services performed for wholesalers

E. At what point does corporation take ownership of fish

F. At what point does corporation relinquish ownership of fish

V. Communications

A. Does the corporation take part in any type of promotion or advertising?

1. To fishermen

2. To wholesalers

3. To retailers

4. To consumers

B. How does the corporation gather market information?

1. Predict prices

2. Predict demand

3. Predict supply

4. Determine inefficiencies

5. Discover under-developed markets

6. Reduce risk

C. How are trading contacts established and maintained at all levels?

VI. Efficiency

A. Is this system more efficient than the previous

1. Criteria used

# SELECTED BIBLIOGRAPHY

## BOOKS


Ashley, C. A., and R. G. H. Smails, Canadian Crown Corporations. Toronto: The MacMillan Company, 1965.

Bartels, Robert, Comparative Marketing: Wholesaling in Fifteen Countries. Homewood, Illinois: Richard D. Irwin, Inc., 1963.

Boddewyn, Jean, "Comparative Marketing," in Jean Boddewyn, (ed.), Comparative Management and Marketing. Glenview, Illinois: Scott, Foresman and Company, 1969, pp. 97-122.

Breyer, Ralph C., The Marketing Institution. New York: McGraw-Hill Book Co., Inc., 1934.

Bucklin, Louis P., "The Classification of Channel Structures," in Louis P. Bucklin (ed.) , Vertical Marketing Systems. Glenview, Illinois: Scott, Foresman and Co., 1970, pp. 16-30.

Carson, David, International Marketing: A Comparative Approach. New York: John Wiley and Sons, Inc., 1967.

Cox, Reavis, Charles S. Goodman and T. C. Fichandler, Distribution In a High Level Economy. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1955

Fisk, George, Marketing Systems: An Introductory Analysis. New York: Harper and Row, 1967.

Galbraith, John K., and R. H. Holton, Marketing Efficiency in Puerto Rico. Cambridge, Mass.: Harvard University Press, 1955.

Gaston, Frederick L., and David A. Storey, "The Market for Fresh Fish That Originates from Boston Pier Landings," in F. W. Bell and J. E. Hazelton (eds.), Recent Developments and Research in Fisheries Economics. Dobbs Ferry, New York: Oceana Publications, Inc., 1967.

Hall, Margaret, John Knapp, and Christopher Winson, Distribution in Great Britain and North America: A Study in Structure and Productivity. London: Oxford University Press, 1961.

Helm, Franz C., The Economics of Co-Operative Enterprise. London: University of London Press Ltd., 1968.

Hirsch, Leon N., Marketing in an Underdeveloped Economy: The North Indian Sugar Industry. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961.

Jaffe, Eugene D., "A Flow Approach to the Comparative Study of Marketing Systems," in Jean Boddewyn (ed.), Comparative Management and Marketing. Glenview, Illinois: Scott, Foresman and Co., 1969.

Jeffreys, James and Derek Knee, Retailing in Europe, Present Structure and Future Trends. London: The MacMillan Company, 1963.

McGarry, Edmund D., "Some Functions of Marketing Reconsidered," in Reavis Cox and Wroe Alderson (eds.), Theory in Marketing - Selected Essays. Chicago, Ill.: Richard D. Irwin, Inc., 1950 pp. 263-279.

Putnam, D. F., and D. P. Kerr, A Regional Geography of Canada. Toronto: J. M. Dent & Sons Limited, 1966.

Shapiro, Stanley J., "Comparative Marketing and Economic Development," in George Schwartz (ed.), Science in Marketing. New York: John Wiley and Sons, Inc., 1965.

Sherbini, A. A., "Classifying and Comparing Countries" in Bertril Liander, Comparative Analysis for International Marketing. Boston: Allyn and Bacon, Inc., 1967.

Terpstra, Vern, International Marketing. New York: Holt, Rinehart, and Winston, Inc., 1972.

Vaile, Ronald S., E. T. Grether, and Reavis Cox, Marketing in the American Economy. New York: Ronald Press Co., 1952.

## REPORTS - PUBLISHED

Annual Statistical Review of Canadian Fisheries, Vol. 4, Ottawa, Ontario: Department of the Environment, 1972.

Freshwater Fish Marketing Corporation, Annual Report, 1969-1970. Winnipeg, Manitoba: Freshwater Fish Marketing Corporation, 1970.

Freshwater Fish Marketing Corporation, Annual Report, 1970-1971. Winnipeg, Manitoba: Freshwater Fish Marketing Corporation, 1971.

Freshwater Fish Marketing Corporation, Annual Report, 1971-1972. Winnipeg, Manitoba: Freshwater Fish Marketing Corporation, 1973.

McIvor, George H., Report of Commission of Inquiry Into Freshwater Fish Marketing. Ottawa, Ontario: The Queen's Printer, 1965.

## PROCEEDINGS

Bartels, Robert, "A Methodological Framework for Comparative Marketing Study," in S. A. Greyser (ed.), Toward Scientific Marketing: Proceedings of the 1963 Winter Conference (Chicago, 1964), pp. 383-390.

Cox, Reavis, "A Search for Universals in Comparative Studies of Domestic Marketing Systems," in P. D. Bennett (ed.). Marketing and Economic Development: Proceedings of the Fall 1965 Conference. Chicago: American Marketing Association, 1965, pp. 143-162.

Minutes of Public Hearings, Commission of Inquiry Into the Freshwater Fish Industry, George H. McIvor, Commissioner, Ottawa, Ontario: The Queen's Printer, 1965.

## YEARBOOKS

Dominion Bureau of Statistics. Canada Year Book, 1969. Ottawa, Canada: Statistics Canada, 1969.

Dominion Bureau of Statistics. Canada Year Book, 1972. Ottawa, Canada: Statistics Canada, 1972.

## ARTICLES

Bucklin, Louis P., "Postponement, Speculation and the Structure of Distribution Channels," Journal of Marketing Research, Vol. 2 (February, 1965), pp. 26-31.

Cox, Reavis and Charles S. Goodman, "Marketing of Housebuilding Materials," Journal of Marketing, Vol. XXI, No. 3 (July 1956), pp. 36-61.

## GOVERNMENT DOCUMENTS

Canada, Parliament. "An Act to regulate interprovincial and export trade in freshwater fish and to establish the Freshwater Fish Marketing Corporation," 17-18 Elizabeth II, Chapter 21, 1969.

Canada, Parliament. House of Commons, Official Reports of the Debates of the House of Commons: December 18, 1968, January 16, 1969, "Establishment of Freshwater Fish Marketing Corporation," pp. 4133-4146, 4369-4409, 5270-5288.

Canada, Parliament. House of Commons, Official Reports of the Debates of the House of Commons: February 27, 1969, "Authorization for The Establishment of a Department of Fisheries and Forestry, and Other New Departments," pp. 6035-6052.

## OTHER PUBLISHED MATERIALS

Gillespie, Samuel M., and Jon L. Gregory, A Study of the Marketing Channels for Fresh Finfish in the Texas Fishing Industry. College Station, Texas: Texas A & M University, 1971.

Quick Facts About the Freshwater Fish Marketing Corporation. Winnipeg, Manitoba: Freshwater Fish Marketing Corporation.

You and the Freshwater Fish Marketing Corporation, Winnipeg, Manitoba: Freshwater Fish Marketing Corporation

## UNPUBLISHED MATERIALS

Jaffe, Eugene D., Towards a Systems Approach to the Study of Domestic Marketing Abroad: A Case Study of Israeli Food Distribution. (unpublished Ph.D. dissertation, University of Pennsylvania, 1966).

Schary, Philip B., Linn Soule, and Robert E. Shirley, "Analysis of the Distribution System for Northwest-Originated Fresh and Frozen Salmon," Preliminary draft, Corwallis, Oregon: Oregon State University, 1970.

# PERSONAL COMMUNICATIONS

Roger Bedard, Fisheries Division, Department of Industry, Trade, and Commerce, July 26,1973.

Ray Brooker, Freshwater Fish Marketing Corporation, September 6, 7, 1972 and other times.

P. Carriere, Advisory Committee, Freshwater Fish Marketing Corporation, personal letter.

D. F. Corney, Freshwater Fish Marketing Corporation, September 6, 7, 1972.

G. E. Corldwell, Board of Directors, Freshwater Fish Marketing Corporation, personal letter.

W. Crate, Advisory Committee, Freshwater Fish Marketing Corporation, personal letter.

Joshua John, Fisheries Division, Department of the Environment, July 25, 1973.

Baldur H. Johnson, Freshwater Fish Marketing Corporation, September 6, 7, 1972.

T. R. Kinsella, Fisheries Division, Department of Industry, Trade, and Commerce, July 27, 1973.

Mark Kotak, Kotak-Queen City Seafood Corporation, July 26,1973.

Gene Kulber, State Fish, Inc., July 26, 1973.

Harry Meltzer, State Fish, Inc., August 8, 1972

M. J. Paetz, Board of Directors, Freshwater Fish Marketing Corporation, personal letter.

R. E. Partridge, Board of Directors, Freshwater Fish Marketing Corporation, personal letter.

Myer Pick, Pick Fish Company, July 27, 1973.

R. Riley, Rohr Fish Company, July 27, 1973.

S. T. Sigurdson, Freshwater Fish Marketing Corporation, September 6, 7, 1972.

S. Sinclair, Advisory Committee, Freshwater Fish Marketing Corporation, personal letter.

E. Studney, Advisory Committee, Freshwater Fish Marketing Corporation, personal letter.

R. B. Tingling, Administrator, Government of the Northwest Territories, September 6, 7, 1972.

A. W. Wood, Advisory Committee, Freshwater Fish Marketing Corporation, personal letter.